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Job T. Dickins.

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THIRD EDITION--Revised & Enlarged.

TESTIMONIALS

TO

ELWELL'S MEDICO-LEGAL TREATISE

ON

MALPRACTICE

AND

MEDICAL EVIDENCE.

NEW YORK:
BAKER, VOORHIS & CO., 66 NASSAU STREET.

From the great English Physiologist,

WILLIAM B. CARPENTER, M. D., F. R. S., F. G. S.,

Professor of Medical Jurisprudence in the University of London.

"I KNOW OF NO INSTANCE IN WHICH THE COMBINATION OF LEGAL AND MEDICAL KNOWLEDGE HAS BEEN SO REMARKABLY SHOWN AS IT HAS IN MR. ELWELL'S TREATMENT OF THE SUBJECTS HE HAS UNDERTAKEN."

From Prof. Frank Hastings Hamilton, author of a new and valuable work on Fractures and Dislocations.

To Prof. ELWELL belongs the credit of having opened the way in this direction—always the most difficult labor. The book must prove of great value both to medical men and to lawyers. Indeed, I do not see how a lawyer can dispense with it.

I congratulate the author also upon the favorable notices which it has received from the journals everywhere.

From Prof. David Brainard, Editor Chicago Medical Journal.

This book appears to be a full and perfect treatise on the subjects of which it professes to treat. It has received the endorsement of some of the most eminent legal men as well as of physicians in this country, and from a cursory examination it appears to be full, accurate, and prepared with care. Such a book should be in the hands of physicians generally, who are too often not aware of the responsibility which they assume in accepting the charge of surgical cases.

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From Hon. John McLean, of the Supreme Court of the United States.

No one who did not unite both professions could have written so valuable a book. I have no knowledge that any one, under similar circumstances, has attempted to do what Mr. ELWELL has so well performed.

From the Boston Medical and Surgical Journal, (DR. WALTER CHANNING.)

FONBLANQUE, a distinguished English barrister, and PARIS, an equally distinguished physician, united their forces and professions in a work on Medical Jurisprudence, and the product of the connection was an excellent treatise on that important subject.

We have just read an American work on Medical Jurisprudence, the literary history of which reminds us of the copartnership of PARIS and FONBLANQUE. Dr. ELWELL, the author of the volume before us, having studied and practiced medicine for several years, turned over a new leaf, and studied and practiced law for as long a time, and now presents us with the product of the two professions, united by a Siamese form of attachment, which makes it as easy to work for and with one as for and with the other. The design in this work, it will be seen, is novel, and it is excellently well accomplished. If it do not sustain the old adage, that two of a trade can never agree, it certainly does prove that two of the most diverse callings may act in perfect harmony, and for the equal benefit of both.

We heartily commend Dr. ELWELL'S work to our readers. It is from one who knows well what his profession wants in such a work; and in our judgment he has met and satisfied that demand.

From John Delamater, M. D., LL. D.

It is a book which should be in the library of every physician and surgeon. Any member of the profession who will purchase it, and spend two months in its study, will be well repaid for the cost and labor.

From Hon. John F. J. Fithian, New York District Attorney.

I have had occasion to refer to and cite in Court ELWELL'S work upon "Malpractice and Medical Evidence." In my opinion, it is a *most convenient and reliable book of reference in all cases of Medical Jurisprudence.* The medical and chemical writers have given us voluminous treatises upon their particular branches of science, as have also the legal writers, thus leaving us business men to grope through the whole mass in order to extract therefrom a few practical and elementary rules and principles for every-day use. *In his treatise he has saved us this labor, by giving us compactly and succinctly, in a convenient form for reference, with all the recent authorities, so much, and no more, of the two systems of law and medicine as we are most frequently called upon to deal with in the practice of our profession.*

From Prof. Valentine Mott, M. D., LL. D., New York.

I am sure it is a work that will be greeted at the Bar, and because the most useful that the medical profession has ever had as a refuge in difficulties and dangers, that profession will also welcome it.

From the Boston Law Journal.

The earlier part of the book is occupied with malpractice in cases of amputations, &c., and constitutes a new and valuable contribution to medico-legal literature. The book possesses particular merit.

From Robley Dunglison, M. D., Professor of the Institutes of Medicine, &c., in Jefferson College, Philadelphia.

I cannot doubt that it will prove a useful guide to the solution of many of those intricate questions which present themselves so frequently to the medical and legal practitioner.

From a Review of this work in the **New York Journal of Medicine.**

"Some books," says Lord BACON, "are to be tasted, some to be swallowed; some few to be chewed and digested." Prof. ELWELL's belongs most emphatically to the latter class, and its frequent mastication and digestion by both professions of both law and medicine will be found to afford them that very pabulum for which they have long and anxiously waited. Indeed, considering the very great number of legal and medical text-books which have been put forth in elucidation of almost every specialty which professional necessities have created; and looking even at those on medical jurisprudence which best evince the syncretism of two great sciences, it is singular to perceive that the subject of malpractice is nowhere discussed. Even the omnivorous and encyclopædic BECK, who, with probe and tentacle, has explored every rill and rift, every peak and cavern of forensic medicine, and has heterogeneously incorporated everything that was ever said or p inted upon this subject into his text, overlooks entirely the very important and magistral topic of malpractice. * * We cannot help saying that if there be, among all the chapters in this truly valuable book, one which we consider as a keystone of all the rest—and whose honest, frank and conservative tone will do more to beget a true medico-legal union before the Courts, where now we so often have a complete antagonism of the two professions—it is the chapter on "The Position of the Courts upon Insanity." Indeed, throughout all his discussions upon this vexed question, Prof. ELWELL shows the fruit of a large observation of facts, as well as of critical examination into the legal and physical causes of divergence between the professions of law and medicine. And we shall be much mistaken if the dissemination of his logic does not produce a radical change in the minds of many of those whose chief delight it has been, in season and out of season, to heap reproach upon the Courts for not surrendering at once some of the cardinal principles of human government as applied to rational and responsible beings. * * * We cannot close this brief and imperfect review of Prof. ELWELL's book, throughout which we have seen so much more to praise and admire than we have dared give utterance to, without calling attention to the fact that the field trodden by him is both a new and a rich one.

From **E. Delafield Smith,** author of Smith's New York Reports.

While the work will be regarded as a valuable contribution to Medical Jurisprudence in general, the portions devoted to the subject of *malpractice must prove of peculiar value.* They will effectively aid in a just determination of a class of cases too often unrighteously prosecuted, and which involve either the safety of the community or the sanctity of individual professional character.

From **Prof. Geo. B. Wood, M. D.,** Jefferson Medical School, Philadelphia, and author of Wood's "Practice of Medicine" and the "United States Dispensatory."

I have been much pleased with the scope of the work, and, in the parts which I have examined, have found nothing of which I could not approve.

From the **Cincinnati Lancet and Observer.**

The author has appreciated the difficulties which both physicians and lawyers labor under in suits of malpractice. His book is an exceedingly valuable one to both professions. While he seems to be a fine jurist, he at the same time gives evidence of having mastered the profession of medicine. The chapters on "Medical Evidence" are especially worthy of notice. The author is a clear writer, and we recommend the book to all our readers.

From the **London Medical and Chirurgical Review.**

Dr. ELWELL deserves the thanks of the medical and legal professions for the very able work he has presented to them. It is a most learned work, and worthily upholds the high character which already distinguishes trans-Atlantic jurisprudential literature. Dr. ELWELL offers a masterly sketch of the principles which should guide the medical witness in the discharge of his duties.

From **William Curtis Noyes**, New York.

I have found it accurate, valuable and learned. It possesses one advantage over most other works of a similar kind, and that is, it is written by a lawyer as well as a physician—a thing, in my judgment, indispensable in a treatise on this subject. I regard this book as quite essential to the library of every practicing physician, and trust it will command the attention its merits deserve.

From **Judge Bellamy Storer, LL. D.**, of Cincinnati.

I am sincerely thankful for this very excellent work on that branch of medical jurisprudence which is really practical. I have looked over the volume pretty carefully, and I am convinced and satisfied that the author has done a service for which the public should be grateful.

From the **New York Medical Press.**

We regard the work as bridging a chasm hitherto existing (for none of the works on Medical Jurisprudence have been at all sufficiently practical) in the medical and legal professions, *particularly in the former*. We recommend it for its merits, which we consider paramount, to our medical brethren.

From **Prof. Ordronaux**, of the Law Department of Columbia College, New York.

Where everything is so well discussed, substantiated and fortified by a judicious selection of leading authorities, it is unnecessary for me to point out, or indicate by name, any particular chapter as pre-eminently meritorious. I am convinced, however, that the one on "The Position of the Courts in Insanity" is destined to exercise a most beneficial influence on the profession of both Law and Medicine, by exhibiting to each the true position which the interests of justice as well of humanity require at their hands.

From the **American Medical Gazette**, edited by D. MEREDITH REESE, A. M., M. D., LL. D., Professor of the Institutes of Surgery and Medical Jurisprudence.

This is a new, timely and independent work, written by a gentleman combining in himself the professions of both law and medicine, having had practical experience in both. The learning and ability of the author have enabled him to produce a work which we should suppose would henceforth be indispensable to every law library, and should be found in every medical library, and is hence appropriately dedicated to the young men of the United States engaged in the study or practice of medicine or law. It bears the motto of the distinguished Philadelphia counselor, DAVID PAUL BROWN, Esq., viz.:

"A doctor who knows nothing of law, and a lawyer who knows nothing of medicine, are deficient in essential requisites of their respective professions."

We have looked over this book with much interest, and cordially commend it to our profession, as worth all the books extant on Medical Jurisprudence; and on the subject of Malpractice, for which prosecutions have been instituted against distinguished surgeons in various parts of the country, we have seen nothing worthy to be compared with it; for, in the most of analogous works, this important topic has been ignored. Dr. ELWELL has very properly availed himself of the masterly papers of Prof. HAMILTON, of Buffalo, in the "Transactions of the American Medical Association," and has discussed the whole subject from a legal stand-point.

All the important questions appertaining to Medical Jurisprudence are here treated at sufficient length, and without the speculations or irrelevant topics which disfigure the works on this subject. And now that the great work of the Drs. BECK has been spoiled in remodeling, by the monographs of half a score of officious intermeddlers—who have perverted what the authors wrote, and substituted their own commentaries on special departments, of which several of them betray an ignorance and presumption disreputable to the profession, and positively deteriorating to the work—we look upon the treatise of Dr. ELWELL as the best in our language on the subject, and doubt not it will become the standard authority, not only in the Courts of law, but in our medical schools and colleges.

A

MEDICO-LEGAL TREATISE

ON

MALPRACTICE

AND

MEDICAL EVIDENCE,

COMPRISING THE

ELEMENTS OF MEDICAL JURISPRUDENCE;

BY

JOHN J. ELWELL, M. D.,

MEMBER OF THE CLEVELAND BAR, ONE OF THE EDITORS OF NEW EDITION OF BOUVIER'S LAW DICTIONARY, PROFESSOR IN OHIO STATE AND UNION LAW COLLEGE AND WESTERN RESERVE MEDICAL COLLEGE, ETC., ETC.

A doctor who knows nothing of law, and a lawyer who knows nothing of medicine, are deficient in essential requisites of their respective professions.—DAVID PAUL BROWN.

THIRD EDITION—Revised and Enlarged.

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PREFACE TO THIRD EDITION.

Two large editions having been exhausted since this work was first published, and another demanded, the author has thoroughly revised, corrected and enlarged the present edition. After having corresponded and conferred with many eminent legal and medical men, and carefully read and considered the reviews and criticisms of the work in the law and medical journals of this country and of England, he is glad to find so little to change or correct in the original elementary matter of the text. Under the light of journalistic strictures, as well as from proper reflection and the study of all later works in law and medicine bearing upon the topics discussed here, the author has endeavored to make this edition as nearly perfect as possible. All defects, pointed out by others or discovered by the author, it is believed have been removed.

The Notes to the respective Chapters (inserted in the Appendix) will be found full and correct—embodying all the latest decisions of American and English Courts.

The anxiety and sense of responsibility felt when this work was first sent forth has been relieved by the very favorable reception it has universally met in the legal and medical professions—for it may not be improper to say that the book has achieved a respectable success; and it is with gratification and satisfaction that this edition is given to the professional public.

J. J. ELWELL.

Cleveland, January 1, 1871.

TO THE

YOUNG MEN OF THE UNITED STATES,

ENGAGED IN THE STUDY AND PRACTICE OF

MEDICINE OR LAW,

TWO NOBLE PROFESSIONS DESIGNED TO REGULATE THE

HEALTH AND CONDUCT OF MANKIND,

AND WHICH SHOULD EVER KINDLY EMULATE EACH OTHER IN THE DEVELOPMENT AND PRACTICAL APPLICATION OF THE PRINCIPLES OF

TRUTH,

UPON WHICH BOTH ARE FOUNDED;

THIS TREATISE, THE RESULT OF THE STUDY AND PRACTICE OF

MEDICINE AND LAW,

IS RESPECTFULLY DEDICATED

BY THE AUTHOR.

CLEVELAND, *December*, 1859

PREFACE.

The active practice of Medicine and Surgery for several years having taught me something as to the magnitude of the duties and difficulties, the wants and liabilities of the Medical profession; and a corresponding length of time devoted to the study and practice of Law, having deeply impressed me with the importance of the two professions, relatively as well as independently considered, developing also the obvious fact, that legal men, and legal works, devote too little attention to Medico-legal subjects;—I have thought that in no way could I better serve the interests of the two great professions to which I have devoted my life, and promote the great ends of Science and Justice, than by endeavoring to embody in a concise, complete, and comprehensive work, all the settled principles, and known authorities, as well as the result of my own thought and experience, upon the subject of Malpractice and Medical Evidence.

While a member of the Medical profession, and in the practice of Surgery, and also during my subsequent practice at the Bar, my attention has been repeatedly and imperatively called to the subject of Malpractice, as well as that of Medical Evidence. In looking around for light upon these important questions, I was astonished and disappointed to find nothing upon the subject of Malpractice in our works upon Medical Jurisprudence, where I thought it properly belonged; nor did the works on the practice of Surgery afford the necessary information. Except the able reports of Prof. Hamilton upon Deformities after Fractures, made to the American Medical Association, and where now and then a case has found its way into the medical periodicals, this subject is scarcely alluded to in the whole range of medical literature.

I have been equally surprised to find the same deficiency existing in the elementary works of the Legal profession; although it is

well known that the attorney experiences the greatest difficulty, doubt, and perplexity, in preparing cases involving the question of Malpractice, and in the examination of medical witnesses. The difficulties which embarrass the lawyer in this particular field of legal investigation, arise from the fact that the medical aspect of these questions,—of Malpractice in particular,—is to him buried in the technically intricate labyrinths of another science, while his own authorities lie scattered in undigested confusion throughout the vast range of law Reports.

On viewing the field, therefore, from these two points,—the Medical and the Legal,—and being fully aware of the complicated difficulties and perplexities surrounding the whole subject, and deeply impressed with the magnitude of the undertaking, I felt that valuable service might be rendered by me to the two professions, by attempting the systematic arrangement of a medico-legal treatise; thus supplying, if possible, a general want. A somewhat extensive correspondence with leading physicians, surgeons and lawyers, in this and other States, has encouraged and confirmed the idea,—they uniformly agreeing with me as to the necessity of such a work.

It is now submitted, such as it is, with some confidence, to the hands and judgment of the members of the two professions for whom it is designed.

Whatever the value of the work may be, it has been the result of much thought, and long labor; and I claim for it complete originality in the general plan and treatment of the subject, whether good or bad.

It is my earnest desire that its mission may be beneficial, by relieving, to some extent, the labors of the attorney, while it sets forth and maintains the rights of the medical and surgical practitioner,—not shielding the culpable and guilty,—and at the same time bringing the two professions into closer union, producing greater harmony, sympathy and usefulness.

J. J. ELWELL.

CLEVELAND, *December* 1, 1859.

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MALPRACTICE AND MEDICAL EVIDENCE.

INTRODUCTION.

THE GENERAL PLAN AND SCOPE OF THE WORK.

Frequent, important, and troublesome as are the cases of alleged Malpractice by medical men, there is yet no work treating upon the subject, and medical and legal inquirers after information upon the question, are obliged to seek it in the vast range of elementary works upon Medicine and Law, and in the unlimited field of Reports, constituting the larger part of every lawyer's library.

The author trusts that in the first part of this work he has supplied this desideratum,—at least, to a considerable extent.

Happily, Criminal Malpractice is but rarely met with in courts of justice; while Civil suits for damages are of a frequency, alarming, both to the profession of medicine and to the public. Suits of this class, in some parts of the country, seem to be on the increase. So common an occurrence is it for the surgical treatment of the oldest and best physicians and surgeons, in general practice, to be called in question and overhauled in courts of justice, that there is at this time a general feeling of uneasiness, and a conviction that the business is at best very dangerous, so far as property and reputation are concerned. The result is, that some of the most thoroughly qualified medical men, utterly refuse to attend surgical cases,—confining their practice to

that of medicine alone. They say the compensation usually attending the practice of surgery does not warrant a man of property in exposing himself to the probability of having, sooner or later, to defend his treatment in an action for Malpractice. Victory in these cases is in one sense, defeat, because the disgrace, vexation, and cost, are generally ruinous.

So great has the evil of this indiscriminate attack upon the members of the medical profession become, that some of the State Medical Associations have felt called upon to take the matter into consideration, and act upon it as one of grave importance.

In 1856, the committee on surgery, through their able chairman, Dr. J. W. Hamilton, reported to the Ohio State Medical Association, that, in their opinion, the subject of Malpractice was at that time of more importance to the profession than any other connected with surgery. They say: "there is a standing and apparently cumulative evil,—an evil bearing with the weight of an incubus upon the profession. It is the frequency of difficulties on account of alleged MALPRACTICE in the treatment of fractures. The cases reported, with several others not included in the report, were forced upon the attention of a single member of the committee during the past year, by parties to the difficulty who sought testimony or sympathy. During one week, in as many different counties, four cases were tried."

These statements are illustrated by eight or ten Malpractice cases, in all of which the surgeon had the alternative presented to him of compromising, not only his own reputation, but the honor of his profession, by paying damages, or contesting the question in a court of justice, where a verdict in his favor would be attended with a loss of business, and a heavy bill of expense. Some took one course, and some the other; all suffering more or less in business and property. The parties sued were all believed to be good and well-educated professional men. In conclusion the report says: "What course shall the profession take in regard to the matter? Severe implications are being meted out to our

professional brethren on account of imperfections, resident not in themselves, but in their art."[1]

If it is true that a certain class of citizens,—a particular profession,—is thus situated and exposed without fault on their part, what is the remedy for the evil? Can not the negligent, careless and ignorant be punished without involving the careful, skillful and innocent? These questions are important.

It is suggested in the report already referred to, that the profession of medicine protect itself thus: "Let it be distinctly understood that those individuals immediately implicated are entitled to the sympathy and assistance of as many of their professional brethren as may be necessary to sustain them. And where it is possible to avoid it, let not a member of the profession be found in the ranks of the prosecution. It is believed that in this way very much may be done to diminish the frequency of the occurrences, and thus afford protection to individuals in the profession, as well as promote its dignity and usefulness."

This plan may be found impracticable; indeed it always has proved so. Professional sympathy will not remedy the evil.

The only effectual and permanent mode, it is believed, by which the evil can be reached, remedied, and guarded against, is, by *elevating the standard of Medico-legal knowledge* in the professions of Law and Medicine. It is not to be denied that members of the legal profession, with few exceptions, are imperfectly informed upon medical questions connected with law, though they may be well educated in law generally, and well informed on every other subject.

The science of law and its legitimate details are so boundless, lawyers seem to have no heart or time to look closely and critically into another, sister science, equally extensive and difficult with their own. The reluctance and failure on the part of the

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[1] Transactions of the Eleventh Annual Meeting of the Ohio State Medical Society, 1856, p. 53.

members of the Bar to study Medico-legal subjects, arises, in part, if not principally, from the bad arrangement, and general character of the works upon Medical Jurisprudence, which pretend to treat upon those matters. The subject of Malpractice being altogether ignored, the attorney is at once startled, if not disgusted, at their theoretical and formidably medical and chemical character; except which, he thinks he sees but little.

The work written by Mr. Chitty, who was originally educated for the medical profession, is really an elaborate work on Anatomy, Physiology, Pathology, the Practice of Medicine, and Surgery. There is but little Medical Jurisprudence in it, excepting the name, and the study of it is equivalent to the study of medicine in all its departments.

Dr. Beck's great work, consisting of two ponderous volumes, is a vast store-house of undigested facts, collected during a lifetime by its learned author; many practical and useful, and many valueless. It is a great compilation from every quarter; embodying the history of Medical Jurisprudence; treating upon Chemistry, the Practice of Medicine, etc. As a work of reference it is of much value; yet so elaborate and so endless are its details, that the practical is often covered up with the useless and obsolete. Almost every case that has ever been published, in any country, in book or newspaper, important or unimportant, here finds a resting-place. Often the circumstances, authority and date of the case are not given, leaving the whole in confusion and doubt.

These old and isolated cases are constantly making trouble in courts. The attention of the medical witness is called to them as contradicting what he avers to be the present state of the question; and resting, as they do, upon the authority of Beck, much more consequence is given to them than they deserve. This kind of matter should not be embodied in works on Medical Jurisprudence,—it only tends to embarrass both witness and counsel.

Many of the later works upon the subject of Medical Jurisprudence are obnoxious to the same objection, possibly, to a less

degree than the leading ones named. Thus, the attorney is compelled, by the manner in which the subject is treated in these works, to pursue an unnecessarily extensive course of medical reading and study, in order to become at all familiar with the points involved in Medico-legal questions.

Could the subject be presented in a clear and brief manner, so that the medical element entering into the case, and that alone, should appear,—enabling the lawyer to fully comprehend the points and connection, without throwing upon him the laborious and general study of the medical science,—it would go a great way toward encouraging the study of those questions by the members of the Bar; as they have not the time for a general investigation of all the subjects connected with medicine, unless they neglect something of equal importance.

On the other hand, the medical man has no possible mode of determining the extent of his responsibilities and liabilities, as such, in a case of alleged Malpractice, without a thorough study of the principles of law, as well as a laborious examination of libraries of Reports. He derives no help whatever from the works on Medical Jurisprudence. He may read them all, and he is still in the dark as to the rules of law that bear upon him, and by which he is to be judged; and from his knowledge of the usual results attending such cases, he is at once discouraged, ready to compromise in any way, and then, perhaps, leave the profession: when, if he could turn with confidence to the correct and highly humane laws applicable to such cases, if properly administered,—ascertaining at once where he stands and what are his chances,—he would take courage and feel comparatively safe.

The author has attempted in this volume to present the Medico-legal questions likely to engage most frequently the attention of attorneys and medical men, in a circumscribed and compact form; and to reduce, if possible, the voluminous literature of the subject,—scattered throughout law and medicine,—to a practical system:—with what success, others are the judges.

Proceeding upon the idea that much more matter of a strictly theoretical and medical character, is connected with the discussion of Medico-legal subjects, in most works upon Medical Jurisprudence, than is necessary; tending as it does, to repel, rather than enlighten the legal inquirer, and rendering his search uselessly laborious; the author has endeavored to strip the subject of all such profitless details and discussions, leaving the consideration of speculative themes to other works and writers.

It is also the aim of the present work to furnish to the medical man that necessary information respecting his legal responsibility as a practitioner and witness, which he has been hitherto unable to attain except by the general study of law. In short, the author believes it possible for both of these classes to arrive at the desired point, and command the necessary information, by a much shorter road than that usually taken, and at a much less expenditure of time.

In the opening chapter of the work, the author has attempted to lay down the general principles of law applicable to medical responsibilities, as held by the courts of England and this country, with full references to the cases where medical men have been tried for alleged Malpractice, as well as to other cases involving the same principles; then, in a series of chapters, the difficulties peculiar to the medical profession,—its possibilities and its impossibilities,—what the medical practitioner can do and what he can not,—are set forth as concisely as may be, with references. The subjects of Amputations, Fractures and Dislocations,—out of the treatment of which grow the great majority of suits for Malpractice,—are taken up, and an exhibit of the present state of the science in regard to the Surgery of these cases presented; that just what should be rightfully expected and required of the surgeon, may appear as far as possible, and what should excuse an imperfect result in his treatment. These several subjects are followed by the leading adjudicated cases upon the questions, in English and American courts.

A digest of Prof. Frank H. Hamilton's able and valuable Report

on Deformities after Fractures, and a chapter on the responsibilities of Druggists, with the leading cases where they have been sued, closes the part of the work devoted to Civil Malpractice.

Criminal Malpractice, including the subject of Abortion, is next presented, together with the leading adjudicated cases.

Part Second, is devoted to the consideration of the leading points and subjects involved in Medical Evidence.

The medical man should understand clearly his rights and duties while discharging the obligations of a witness, if he would acquit himself creditably; this knowledge he can only gain by giving some attention to the general rules of evidence by which he is governed and guided while in court; hence, in several chapters the subjects of Evidence in General, Circumstantial Evidence, the Testimony of Experts, Privileged Witnesses and Communications, and Medical Books as Evidence, are briefly considered. If the medical witness would devote as much time and thought to these several departments of evidence, as the attorney gives to the consideration of the medical questions arising where he is interested, there would at once be a more perfect understanding between the witness and lawyer, and a material cause of irritation and misunderstanding would be removed. Is not this exceedingly desirable?

It is possible the importance of the medical witness's position, to himself and to his profession, and as the vindicator of justice, has been over-estimated in this treatise. It is thought, however, that at this point, the members of the medical profession should make a firm stand, and by their knowledge, candor, and firmness, vindicate their profession before the world. A distinguished lawyer has said: "The condition of a scientific witness must be most awful, who gives any other opinion than that which is infallible. Opinions in cases of poisons we have always considered highly questionable, and requiring the utmost possible care, and especially in the application of new systems, that even have not undergone the test of time and experience. The jurymen shelter themselves under the opinion of the doctor, ignorant of their own

privileges and duties, and not observant of the defendant's rights; and the doctor, thus being superior in matters of science, forgets his limits, and often spreads ruin around."[1]

In this treatise are discussed only those Medico-legal subjects, which are constantly engaging the attention of courts, and the medical witness; these, it is believed, are treated thoroughly.

The great and difficult question of Insanity, which is almost entirely in the hands of the medical witness, is examined at considerable length, and the leading adjudicated cases appended. Also, the subject of Poisoning,—by arsenic and strychnia in particular,—is treated, with the leading cases given. Cases of criminal poisoning by arsenic and strychnia are more frequently before the courts than all others; these, therefore, have been fully considered in their Medico-legal bearings.

Infanticide, Wounds, Rape, and Coroner's Inquests, close up the subjects treated in this work.

Throughout, the author has intended to leave abstract questions of Science, Anatomy, Physiology, Therapeutics, Chemistry, and the like, to those able writers who have made them *specialties*, and whose works are in the libraries of every medical man. To these, the attorney can have access should he wish to pursue any particular point, or branch of study, into its minute details. It would be folly, in a work of this character, to attempt to anticipate him here,—indeed, this is the objection to many works on Medical Jurisprudence. To the physician or surgeon, it would be useless, as he has the discussions in full in his elementary works.

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[1] David Paul Brown, 2 Forum, 236.

Note.—Since the publication of this work, Prof. Ordronaux, of New York, has written an able and valuable book on "The Jurisprudence of Medicine," embracing the subject of Malpractice. To this work the author is indebted for valuable references and cases.

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PART I.

MALPRACTICE.

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MALPRACTICE.

CHAPTER I.

GENERAL PRINCIPLES OF LAW APPLICABLE TO MEDICAL MEN.

The general principles of law, defining the civil responsibilities and duties of physicians, lawyers, engineers, machinists, shipbuilders, brokers, and other classes of men whose employment requires them to transact business demanding special skill and knowledge, are the same.

It is of much importance, therefore, to these classes, that the rules of law applicable to them, be well and clearly settled, and thoroughly understood by those upon whom they are to act, as well as by the authorities upon whom devolve the responsibility of their administration.

Some of these classes, however, are erroneously supposed to be held to a more strict accountability than others. This sterner rule has been, at times, applied to the medical profession. It was said by the Court, in the case of Leighton *v.* Sargent,[1] that, "at the present time, it is to be feared, there is a tendency to impose some perilous obligations, beyond the requirements of the law, upon medical men." It is to be regretted that not only in New Hampshire, but in almost all parts of the country, this has

[1] 7 Foster, 468.

been the case, as if more is to be expected of that class, under the same set of circumstances, than any other.

At the outset, then, of our inquiry into the subject of Medical Malpractice, it becomes necessary to carefully define, as far and clearly as may be, the nature of the contract entered into between the medical man, on the one hand, and the public, or patient, on the other, in regard to his duties, qualifications and general conduct, while this obligation rests upon him.

The nature of the contract between the physician and patient, and attorney and client, is alike: neither class, without an express contract to that effect, is a warrantor or insurer.[1] Certainly nothing unreasonable or oppressive should characterize the rule of law in its application to the conduct of the professional man, thus making a different rule from that applicable to other men.

The professional man does not agree, or stipulate, to carry the case through to a successful issue, at all events, and notwithstanding all contingencies; and he is not to be tried by the result.

If a man contracts to do a thing that is absolutely impossible at the time of making such contract, he is not bound thereby, because no man can be compelled to perform an impossibility.[2] But a distinction is taken between a contract to do a thing which is accidentally impossible, and wherein the party engages to do something absolutely impossible; for, in the former case, the contract is binding, notwithstanding it was beyond the power of the party to perform it—it being his own fault and folly that he did not expressly provide against those contingencies he should know might possibly transpire, and exempt himself from responsibility in certain events. In such a case, therefore, the performance is not excused by the occurrence of an inevitable accident, although it was not foreseen by, or within the control of the party.[3]

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[1] Hancke *v.* Hooper, 7 C. & P. 81.

[2] Chitty on Cont. 629; Pothier's Treaite des Obligations, c. 1, sec. 4.

[3] Chitty on Cont. 630; White *v.* Mann, 561.

The physician or surgeon may, undoubtedly, undertake, by express contract, to perform a cure absolutely.[1] In a contract of this kind, the utmost diligence and skill will not excuse him, should the result be unfortunate; because it was his own fault, or inexcusable ignorance, that so uncertain a result should have been guaranteed successful. The extent of the physician's or surgeon's liability, under an express contract to cure, will depend upon the circumstances of the case. If he undertakes an absolute impossibility, the law will not hold him responsible for the full extent of the damage resulting to the patient by reason of the failure to cure. His responsibility extends to a forfeiture of all compensation for medicine and service. The impossibility of the undertaking excuses him in part.

Neither will a want of sufficient skill or knowledge to fulfill an express contract excuse its performance. A builder may agree to erect a house or a ship of a certain description, and he can not afterward excuse himself on the ground of his want of sufficient skill. In that case, the maxim of the Civil law applies—*spondet peritiam artis*—the person undertaking to do the work is bound to use a degree of skill and attention adequate to the performance of his undertaking; that is, to do it according to the rules of the art.[2] So, a surgeon may contract for the removal of a limb, the physician for the cure of a disease, or the lawyer for the foreclosure of a mortgage; and by that contract he becomes a guarantor of the result. It is his fault to undertake to do a thing beyond his strength, or for which he has not sufficient skill, or to employ bad workmen: *imperitia culpæ adnumeratur*—ignorance is like negligence, for which one is responsible.[3]

Every person who offers his services to the public generally, impliedly contracts with the employers that he is in possession of

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[1] Leighton *v.* Sargent, 7 Foster, 468.

[2] Jones, Bailm. 22, 23, 62, 97, 120: Story on Bailm. sec. 431; Coggs *v.* Bernard, Ld. Raym. 909; 1 Bell's Com. 459, 5th Ed.

[3] Story on Bailm. 279; Chitty on Cont. 165; 3 Blackstone Com. 122; 2 Greenl. Ev. 145; 1 Bouv. 403; Dig. 50, 17, 132.

the necessary skill and experience which is possessed ordinarily by those who practice, or profess to understand the same art or science, and which is generally regarded by those most conversant with that profession, or employment, as necessary to qualify him to engage in such business successfully.

Mr. Justice STORY says: "In all these cases, where skill is required, it is to be understood that it means *ordinary* skill in the business or employment which the bailee undertakes; for he is not presumed to engage for extraordinary skill, which belongs to a few men only in his business or employment, or for extraordinary endowments or acquirements. Reasonable skill constitutes the measure of the engagement, in regard to the thing undertaken."[1]

Lord Chief-Justice TINDALL says: "Every person who enters into a learned profession, undertakes to bring to the exercise of it a reasonable, fair and competent degree of skill."[2]

This is the doctrine of the common law, in its application to the ordinary rank and file of the professions of Medicine and Law.

It may, at times, be difficult to determine just what the "ordinary degree of skill," as used by law writers, amounts to. It may vary in the same State or country. There are many neighborhoods, in the West especially, where medical aid is of difficult attainment; yet cases of disease and surgery are constantly occurring, and they must, of necessity, fall into the hands of those who have given to the subject but little, if any thought. Thus the inexperienced and the unlearned attend to the surgery in their way, or it is not attended to at all. In such a case, and under such circumstances, and for these reasons, the ordinary degree of skill required by law would be good common sense, or such knowledge as the operator had, joined with a good purpose to help the afflicted, even if such interference rendered the patient a cripple for life. This is the law in both England and

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[1] Bailm. 433.

[2] Lanphire *v.* Phipos, 8 C. & P. 475.

this country. Even in England, it was said by Hullock, in the case of Van Butchell, that "many persons would be left to die if irregular surgeons were not allowed to practice."[1] In these cases, no more, of course, should be expected of the operator than the exercise of his best skill and judgment, however limited that might be.[2]

In large cities and towns, are always found surgeons and physicians of the greatest degree of skill and knowledge. Their pretensions are properly large. They are to be held to a corresponding high degree of responsibility. They contract to do more than the ordinary physician, and they are paid a higher price for what they do; consequently the contract is more difficult to fulfill.

In the smaller towns and country, those who practice medicine and surgery, though often possessing a thorough theoretical knowledge of the highest elements of the profession, do not enjoy so great opportunities of daily observation, and practical operations; where the elementary studies are brought into every day use; as those have who reside in the metropolitan towns; and though just as well informed in the elements and literature of their profession, they should not be expected to exercise that high degree of skill and practical knowledge possessed by those having greater facilities for performing and witnessing operations, and who are, or may be, constantly observing the various accidents and forms of disease.

It will not, therefore, as a general thing, require so high a degree of knowledge to bring this class of physicians up to the rule of ordinary knowledge and skill, as in places where greater facilities are afforded, by which higher professional knowledge is attainable.

Judge Bouvier, it is true, has laid down a different rule, which, upon principle, can not be correct. He says: "If, for example, a

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[1] 3 C. & P. 629.

[2] McCandless *v.* McWha, 22 Penn. 268.

farrier undertakes to cure a horse, he is required to use reasonable skill—if a carpenter undertakes to build a ship, he engages to use the same kind of ability—and the degree of skill rises in proportion to the value and delicacy of the operation. *But he is, in no case, required to have more than ordinary skill, for he does not engage for more.* Under this rule, all professional men, who can recover for their services in an action, are included; and their contract is *locatio operarum*, and not mandate."[1]

For the reasons already given, a man should be held responsible according to what he is actually able to accomplish, or for what he pretends he is able to do. He asks a large price for his services, and gets it, because he is really superior to others in his knowledge and skill, or fraudulently makes those who employ him think that this is the case. He contracts, on his part, to do more, and to do it better than the generality of the profession. Why not hold him to this implied contract? The high-minded medical man wishes to be so held, and the charlatan and pretender certainly should not be allowed to escape behind the ordinary skill and knowledge of honest practitioners, who actually are prepared to accomplish more than he, but promise and pretend less.

The principles of law applicable to attorneys and medical men being the same as to responsibility for ignorance, carelessness, want of proper attention, etc., the cases relating to attorneys, in these respects, may be with profit consulted. Reference is here made to some cases where these principles have been settled.[2]

Most of the cases referring directly to physicians and surgeons,

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[1] 1 Bouv. Inst. 403.

[2] Pitt *v.* Yaldin, 4 Burr, 2060; Laidler *v.* Elliott, 3 B. & C. 738; S. C. 5, D. & R. 635; Russell *v.* Palmer, 2 Wils. 325; Hunter *v.* Caldwell, 16 L. Jour. 2 B. 274; S. C. 11 Jur. 770, and 10, 2 B. 69; Purves *v.* Landall, 12 C. & Fin. 91; Varnum *v.* Mastin, 15 Pick. 440; Stimpson *v.* Sprague, 6 Greenl. 470; Crooker *v.* Hutchinson, 1 Vermont R. 73; Holmes *v.* Peck, 1 R. I. Rep. 242; Wilson *v.* Russ, 7 Shep. 424; 1 Leigh's N. P. 196; 2 Greenl. Ev. 120, Chitty on Cont. 165; 1 Saund. P. & E. 163.

where the courts have passed upon their responsibility, are carefully collected below.[1]

When the act to be done depends upon the skill of the operator alone, the law will imply an engagement to use that degree of skill necessary to produce the desired result; the person so employed having held himself out to the world as being possessed of a degree of knowledge equal to the undertaking. If he has not the knowledge he claims, he is practicing a fraud upon the employer.

In the case of surgeons, physicians, attorneys, etc., another and important element beside skill enters into the result, and for this reason the degree of responsibility is, to a certain extent, and in a manner, relieved and moderated. This important element is the operation of causes and influences over which the practitioner has but little or no influence. They are occult, and no human foresight is able to anticipate them before they have completely deranged and materially interfered by bringing about altogether a different result than that confidently depended upon.

Where a surgeon undertakes to treat a fractured limb, he has not only to apply the known facts and theoretical knowledge of his science, but he must contend with very many powerful and hidden influences; such as want of vital force, habit of life, hereditary diathesis, climate, the mental state, local circumstances, and a thousand other agencies, many of which will be more fully detailed hereafter. These latent conditions often render the management of a surgical case difficult, doubtful and dangerous;

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[1] Seare *v.* Prentiss, 8 East. 347; Slater *v.* Baker, 2 Wils. 359; Moore *v.* Morgue, Cowp. 497; Hancke *v.* Hooper, 7 C. & P. 81; Lanphier *v.* Phipos, 8 C. & P. 475; Grannis *v.* Brandon, 5 Day, 260; Landon *v.* Humphry, 9 Conn. Reps. 209; Howard *v.* Grove, 15 Shep. 97: Gallagher *v.* Thompson, Wright's Reps. (Ohio,) 466; Mertz *v.* Deweiler, 8 W. & S. 376; 1 Saund. P. & E. 91; 1 Wms. Saund. 312, note 2; 1 Bouv. Ins. 403; Bell's Com. 459; to other employments, in Pawtuary, *v.* Wolton, 1 Rolls, Ab. 92; Bull. N. P. 73; Story on Bailm. 280, sec. 429; Paley on Agency, 78; Phillips *v.* Wood, 1 N. & M. 434; Leighton *v.* Sargent, 7 Foster, 468.

they are all potent causes, frequently having greater influence in the result than all the surgeon may be able to accomplish.

For the same reason the retainer of the attorney does not oblige him to conduct a suit to a successful termination. He is responsible for the same degree of skill as required of the surgeon; but he is not to answer for the proverbially uncertain verdict of a jury, or for the personal judgment of a court. These are contingencies which no human power can feel sure of anticipating or controlling.[1]

Ordinary skill, applied to the treatment of disease, is but one of the claims the public holds on the medical man. He also undertakes and contracts that he will use reasonable and ordinary care and diligence, in the exertion and application of his skill and knowledge, to accomplish the purposes for which he is employed. Extraordinary care or extraordinary diligence is no more to be required of him, unless he contracts to furnish them, than extraordinary skill. But what shall be deemed ordinary diligence or care, must have reference to the state of the patient. What would be ordinary care in certain circumstances, would be negligence in others.

The general rule applies here, as in other contracts, that the physician and surgeon shall be held accountable for the exercise of such care and diligence in their employment, as common-sense men, of common care and prudence, usually exert where they are equally interested in business of a similar kind and importance. He agrees to be responsible for the want of such care and diligence, and he stipulates, in no event, without an express contract for that purpose, for any greater liability.[2]

It has been strenuously denied by some, that the liability of the professional man goes to this extent, while others would carry it much further. There are some old decisions that support the

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[1] Wright's Rep. 466.

[2] Kilsley *v.* Williams, 5 B. & A. 820; Patterson *v.* Gandasaqui, 15 East. 62; Howard *v.* Grover, 15 Shep. 97; Foster, 7 Shep. 471.

position that the surgeon or the attorney should not be held responsible, except for *lata culpa crassa negligentia*—manifest fault or gross negligence.[1] These cases may not have intended to lessen the rule of ordinary skill and diligence, but they seem to go further.

The *sphere of responsibility* is the same when the wrong consists of *negligent* acts, though the *measure of indemnity and punishment* may be different.[2]

That the physician is not liable, unless there was *crassa negligentia*, was firmly maintained before the court in the case of Landon *v.* Humphry, tried in Connecticut some years ago. It was declared that this was the only reasonable rule on this subject, because, it was said, what man, even of skill and talents, would undertake to practice medicine, if some little want of ordinary skill, or failure of ordinary skill, or failure of ordinary diligence, or even some trifling want of carefulness, might sweep from him the earnings of a long life of drudgery; that if this rule was applied, no physician, however able or skillful, could escape for a year. The court, however, decided, in this case, that the doctrine and decisions in this country, and also in England, did not require gross neglect, to make the party liable, but that there must be ordinary skill, care and diligence; that if there was either carelessness or want of ordinary skill and diligence, the plaintiff should recover.[3]

It has been said that gross carelessness means nothing in law, and with truth.

In the case of Philip C. Wells *v.* The New York Central Railroad Co., at the March Term, 1858, the Supreme Court held,

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[1] Sumner *v.* Utley, 7 Conn. Rep. 263; Godfrey *v.* Dutton, 6 Bing. 461; S. C. 4 M. & P. 149; Purvis *v.* Lundell, 12 C. & F. 91; Wilson *v.* Russ, 7 Shep. 424; 1 Leigh's N. P. 196.

[2] Archb. Cr. Pl. 411, 2d ed. 1846; 2 Sel. Ray. 1583; 23 Eng. Com. Law R. 54–5; 3 Maule & Sel. 14, 15; 1 Lewin's Cr. Cases, 169; 2 Stark. Ev. 526; 5 Maule & Sel. 198; Broom's Leg. Max. 168–9, 1st ed.; 4 Denio, 464; 41 Eng. Com. Law Rep. 422, 425; 24 Id. 272; 19 Wend. 345–6.

[3] Landon *v.* Humphry, 9 Conn. 209.

SMITH, J., as follows: "I see no ground to measure the degree of negligence. The distinction between the several degrees of negligence is nice, and too artificial for any clear, definite and practical application. Judge CURTIS, in 16 Howard, 477, says, it may well be doubted if these terms can be usefully applied in practice. Judge STORY also remarks,[1] that the law furnishes no definition of the terms 'gross negligence' or 'ordinary negligence,' which can be applicable in practice, and these distinctions are utterly repudiated by the late civil law reporters." It can not, with any propriety, be applied legally to the conduct of a physician or surgeon.

It has been sometimes contended that extraordinary care should be bestowed by the medical attendant upon his patient, because he deals with the vastly important matters of life and health. The physician and surgeon is, undoubtedly, bound, morally, to exert extraordinary care and diligence in a case where life and health are at stake; but he can not, under the light of the authorities, be considered bound, in law, by any other rule, in this respect, than that which governs all classes of men that require ordinary skill in their employment, work or science. "Different things may require very different care. The care required in building a common doorway is quite different from that required in raising a marble pillar, but both come under the description of ordinary care."[2] It undoubtedly requires a higher degree of skill for the successful and safe treatment of *iritis* than that required in rheumatism, because, in the former case, the most important and delicate structure of the system is involved, the parts of which, when affected with an inflammation, may be soon destroyed, so rapid and dangerous is the disease; and unless treated intelligently, and with great promptness, blindness quickly supervenes; while, in rheumatism, but little, perhaps nothing, can be done hastily, it being a disease of the joints

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[1] Story on Bailm. sec. 99.
[2] Story on Bailm. sec. 429.

and muscular system, usually requiring a long course of treatment, giving to the attending physician full time to study his case, and apply his means of cure.

Beside the application of skill, diligence and care, the professional man contracts to use his best judgment in the treatment of disease and injuries. Great room for difference of opinion is left, in the exercise of the art of surgery, as there are usually several ways of doing the same thing—different operations for the treatment of injuries—each operator having a partiality for that mode of dressing that has been successful in his own, or his preceptor's practice. This being the case, the responsibility of choosing the kind of dressings, and the mode of their application, is thrown upon each individual practitioner. So great are the difficulties of weighing the nice yet important questions that arise in every important case—first, to determine what is to be done, and next, as to how it may be best accomplished, require the soundest judgment and discretion of the best individual minds of the profession.

The physician and attorney are not responsible for the errors of an enlightened judgment, where good judgments may differ. Good skill necessarily implies good judgment, and when that judgment is properly brought to bear, any risk or any injury that may result from mistakes of this kind, is upon the employer alone. It has been well said, that "he, too, has judgment to exercise in the selection of the physician or the lawyer whom he will employ; and if he makes a bad selection—if he fails to choose a man of the best judgment—the result is fairly to be attributed to his own mistake, and is not to be visited upon the head of the man who has done his best endeavor in his service."[1] This, however, is to be taken with some degree of allowance. People in general are not the proper judges of the qualifications of scientific men, especially of physicians and surgeons. If they were, imposition and charlatanry would not flourish as they do.

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[1] Leighton *v.* Sargeant, 7 Foster, 473.

Where, then, there are reasonable grounds for doubt and difference of opinion, the professional man, after the exercise of his best judgment, supposing that he possesses the necessary knowledge, is not responsible for errors of judgments or mistakes. He will be charged with error, or should be, only where such errors could not have arisen except from want of reasonable skill and diligence.[1]

Lord MANSFIELD remarks "that attorneys who conduct themselves with honor and integrity, ought to be protected, when they act to the best of their skill and knowledge. Every man is liable to errors, and I should be very sorry to think that it should be taken for granted that an attorney is answerable for every error or mistake, and to be punished for it by being charged with the debt he was employed to recover. A counsel may mistake as well as an attorney; yet no one would say that counsel who had been mistaken shall be charged with the debt."[2]

PORTER, J., remarks: "It has been said that it will not be sufficient for a professional man to say he acted to the best of his abilities, because he should have formed a more just estimate of his own capacity before he engages himself. This doctrine, if sound, would make an attorney responsible for every error of judgment, no matter what care or attention he exercised in forming his opinion. It would make him liable in all doubtful cases, where the wisdom or legality of one or more alternatives was presented for his consideration, no matter how difficult the subject. But when a person, who is appointed an attorney, has the qualification necessary for the discharge of the ordinary duties of

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[1] Hart *v.* Frome, 3 Jar. 547; S. C. 1 Rob. 595; 1 and C. & F. 193; Leighton *v.* Sargent, 7 Foster, 472; Kemp *v.* Burt, 1 N. & M. 262; S. C. 4 B. & A. 424; Shillcock *v.* Passman, 7 C. & P. 289; Laidler *v.* Elliott. 3 B. & C. 738; S. C. 5 D. & R. 635; Montrion *v.* Jefferys, 2 C. & P. 113; S. C. R. & M. 317; Godefroy *v.* Dalton, 6 Bingh. 461; S. C. 4 M. & P. 149; Baikee *v.* Chadless, 3 Camp. 17; Pitt *v.* Yaldin, 4 Burr. 2060; Reece *v.* Rigby, 4 B. & A. 202; 1 Saund. P. & E. 63; Chitt. Con. 165.

[2] Pitt *v.* Yalden, 4 Barr, 2060.

the trust imposed, we are of the opinion that the occurrence of difficulties in the exercise of it which offer only a choice of measures, the adoption of a course from which loss ensues can not make the agent responsible, if the error was one into which a prudent man might have fallen. The contrary doctrine seems to suppose the possession, and require the exercise of perfect wisdom. No man would undertake to render a service to another on such severe conditions."[1]

Yet, in the case of Howard *v.* Grover, the court seemed to hold that, because the defendant erred in judgment, in not cutting off the limb nearer the body, he was liable, and damages were rendered against him for $2,000, not because he failed to remove the whole limb, but because he failed, as it was thought, to remove it a few inches higher up. It was admitted that the defendant was a good surgeon—that he did the job under controversy skillfully, except that there was an error of judgment in the particular mentioned. The court should have held that the surgeon was not responsible for mere errors of judgment—then there would have been no such verdict.

What is well and clearly settled, either by the courts or by statute, must be known to the attorney, and applied by him in behalf of his client; for it is only where there is reasonable ground of difference of opinion, that he is excusable from errors of judgment.

So the physician, or surgeon, must apply, without mistake, what is settled in his profession. His difficulties and doubtful questions are much greater than those of the attorney, for, like him, he has no court of last resort, whose decision is conclusive, to pass upon his unsettled questions.

If the patient does not follow the prescription, and co-operate with the surgeon, he can not afterward call the surgeon to an account for any unfortunate result that may attend the case.

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[1] Percy *v.* Millandon, 20 Mart. R. 75.

In the case of *McCandless* v. *McWha*, the Supreme Court of Pennsylvania said: "Nothing can be more clear than that it is the duty of the patient to co-operate with his professional adviser, and to conform to the necessary prescriptions; but if he will not, or under the pressure of circumstances he can not, his neglect is his own wrong or misfortune, for which he has no right to hold his surgeon responsible. No man may take advantage of his own wrong, or charge his misfortune to the account of another."[1]

While the careless and ignorant of the profession are obnoxious to censure and liability, the most skillful may become so by ordinary neglect. If he leaves his patients in the hands of incompetent persons, when they are under his control, so that his surgical cases are improperly dressed, he runs the risk of being held responsible for their conduct. He must either dress the limb himself, or see that it is correctly done. He must also visit the patient as often as the circumstances of the case seem to require—of which he is, in general, to be the judge.

Should the physician, or surgeon, by reason of indolence, or matters not connected with his profession, neglect the patient he had assumed to treat as surgeon, he is liable. The law requires every man who engages in a profession or special calling, requiring peculiar knowledge and skill—who holds himself out to the world as possessing that knowledge and skill—to devote enough time to such profession as will enable him to discharge its duties with watchfulness and care. If the lawyer undertakes to foreclose a mortgage, and abandons or neglects the matter, by which the client suffers loss, he will be held to account to his client for the damages. So a physician or surgeon, who voluntarily abandons or neglects his patient, from any cause under his control, by the same rule, can not be held irresponsible.

It is no safer, therefore, for a physician or surgeon to have too many kinds of business on hand, than for an attorney. The special engagement must be fulfilled.

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[1] 22 Penn. State Reports, 268.

That physician who can not devote the greater part, at least, if not the whole of his time, to the profession and the kindred sciences, should abandon it altogether—it will be better for his patient, his profession, and safest for himself.

This life is too short for a man to perfect himself in, and carry along very many different kinds of business, without more industry than falls to the lot of most men; two important kinds of business, one, either the law or medicine, can not be properly attended to at the same time. The boundless science of medicine, in all its departments, requires, and may well demand, all the time and talents of its votaries. Its advancement and perfection of knowledge result from the accumulated labors of the ablest successive minds of the profession from one age to another. As a science, it has to contend with more sources of error than any other; and it should be the pride of every American physician to add to the present mass of facts; thus aiding in removing gradually from the profession the difficulties and reproach that weigh so heavily upon it.

It must be admitted that, in America more than in the Old World, it is the habit of the physician to mingle other pursuits with his profession. This and other reasons led Sydney Smith, a quarter century ago, to ask, contemptuously, "What does the world yet owe to American physicians or surgeons?" The implied delinquency of the American profession, in this question, was untrue when propounded; but, at this day, the answer may be, unhesitatingly, that the world owes to the American profession the first successful introduction and application of the anæsthetic agency, which has done more for surgery than all other inventions put together. To it the world owes the first deep, bold, yet successful operation on the vessels of the throat and neck. American surgery, for the last twenty-five years, leaves a record worthy to stand beside that of England.

This the English profession has the honor to acknowledge. A late English writer says: "We must here take the liberty of saying, that few things have pleased us more than, in course of our

reading lately, to find such surprising improvement in the periodical literature of our transatlantic cousins. The American journals which we have read recently abound in the most valuable and original articles, and show the rapid strides which our friends are making to compete with the mother country. We need only add that they have our best wishes. We watch their progress with the greatest pleasure."

It is not to be denied that most of the great and important discoveries in medicine and surgery have been wrought out by long and laborious efforts of the great men who have represented medicine in Europe; still, the profession in America presents a bright galaxy of names, who have not been behind in creditable and honorable deeds. They have earnestly and successfully labored to clear away the obscurities that hung around the science at the commencement of this century, and to lift it from the labyrinth of conjecture and uncertainty that seems, necessarily, to cling to it.

The American profession of medicine may well be proud of the bright array of names that adorns its past and present history. During the last century the profession in England was luminous with great lights, through whose efforts a vast amount of facts, illustrating medicine and surgery, that lay hidden deep beneath ignorance and error, were brought out and practically applied. But, during the last fifty years, the American physicians and surgeons have fully equaled those of England. There is, at this time, a mental activity in the American profession that will, without doubt, in a few years, place it in advance of the world, in regard to new discoveries, and the practical application of old ones. Upon the foundation of Practical Medicine, Chemistry and Surgery, so ably and deeply laid by the labors of the English and French medical men, is to be reared a noble superstructure by the American profession. While the law only holds the profession accountable for the faithful use and application of the facts, means and principles already discovered and understood, yet its honor as well as a great moral law, require of its

members, the discovery of new principles, new relations, and the new application of old principles. As this is being done, medicine and surgery will stand higher and higher in the opinion of intelligent men, than it has ever stood; and, what is of still more importance, its field of usefulness will be greatly extended—thus illustrating the celebrated sentiment of Cicero, "Nothing so nearly approaches the character of the gods, as giving health to our fellow-men."

☞ *See Appendix, page 583, for full Notes on this Chapter.*

CHAPTER II.

THE INHERENT ELEMENTARY DIFFICULTIES CONNECTED WITH THE PRACTICE OF MEDICINE AND SURGERY.

What is well and clearly settled, either by the courts or by statute, must be known and applied by the attorney, for it is only where there may be a reasonable ground of difference of opinion, that he is excusable for errors of judgment; so with the physician—he must know what is well settled in his profession—for he will be held responsible, if he fails to apply, in a particular case, what is settled in the profession, as being applicable to the case. Both law and medicine are, proverbially, uncertain. There are some principles that may be considered settled in both professions. Statutory law, depending upon the action of the Legislature for its existence, is also dependent upon it for its continued life. While in existence it may be considered settled; but its continuance is as uncertain as the character of the Legislature that has jurisdiction over it. Many decisions of the courts are as well settled as statutory law, and not so liable to be disturbed. Many statutes and decisions have stood untouched for years. So far as this is true, law is fixed and settled, and the practicing attorney is expected to know it. Some old questions, and most new ones, are fluctuating, and so unsettled are they, that no lawyer can tell what will be the final result, or to what point they will finally gravitate. Those questions that have not been passed upon by the highest court in the State where they arise, can not be considered settled, even for the time being; but after the court of last resort has passed upon them, these points are settled for a

season. It might be shown, without difficulty, upon what the uncertainty of law depends: why different countries and different States in the same country, have different rules of civil and commercial action; but this is not our purpose—it being with the uncertainty of medicine that we have to deal at present. While the uncertainty of medicine is readily admitted, the reasons of this uncertainty, and the unsettled state of the science, are far from being understood; and, not being understood, more blame is often thrown upon the physician or surgeon than if there existed an intelligent knowledge of the real inherent difficulties of his profession. It is not improbable that the members of the Bar, intelligent as they generally are, may not fully realize the necessary and formidable difficulties that the medical and surgical practitioner have to encounter at every step, and the uncertainty of the results, even in the hands of the most skillful and experienced. It is believed that if this was the case—if lawyers fully comprehended all, or even a part of the great and difficult problems of life, both in health and disease, which the physician and surgeon are trying anxiously and patiently to overcome and solve; fewer cases of alleged Malpractice would find their way into courts of justice, and able advocates would less readily lend themselves to their support. Much of the uncertainty in medicine arises from the fact that the peculiar province of that science is the investigation and management of *animal life*, which can not be fully understood. Its action is still hid in the deep secrets of nature. Sir GILBERT BLAINE, one of the ablest writers of the medical profession, says: "Animal life is not only the most complicated department of nature, but the most vague; for, beside being more or less subject to chemical and mechanical agencies, it possesses such a number of attributes peculiar to itself, and those of such various and fluctuating nature, as to put their influence and combination beyond the reach of all calculation, and so as to present the most formidable and discouraging obstacles to those who may propose, *a priori*, to predict or control its operation, whether in health or disease."

Again: "From what has already been said, however, it is manifest, this certainty holds less strictly in the living human body than in any other subject in nature with which we are acquainted, to which art can be applied. The simplicity of the laws of inanimate nature admits of the most certain inferences, whereas the indefinite action and reaction of the numerous faculties peculiar to life, add greatly to the difficulty and uncertainty of experiment and observation, as already set forth. But this is not all: for constitution being endowed with various degrees of these faculties, an endless variety is found to take place among individuals, giving rise to that uncertainty in the result, that has brought upon it the character of a conjectural art."[1] There is almost an infinite variety of predisposing causes of disease, to which all constitutions are more or less exposed, which influence the delicate structure and functions of the human body. They are not actual disease; but where an accident overtakes the individual laboring under them—and who does not?—it is the match applied to the pre-existing magazine. Many of the symptoms that arise are erroneously and blindly attributed to the wound or injury—the immediate exciting cause—or to the treatment, when, in truth, they are to be sought for behind these circumstances, having been existing, possibly for years, under an appearance of health.

Then there is the vast range of debilitating influences—such as improper nourishment, impure air, excessive exertion of mind and body, want of exercise, and sedentary habits, general long-continued heat or excessive cold, habitual intemperate use of intoxicating liquors; the depressing passions of mind, such as fear, grief and despondency; excessive and repeated evacuations, either of blood or of some secretion; previous debilitating diseases, and the like. There may be, also, a permanent state of excitement or activity in the system, bringing the circulation up to a high degree of activity, though not an actual disease; there is what has been called a redundancy of health, and, while there

[1] Elements of Medical Logic, London, 1825, pages 31, 237.

is, undoubtedly, more than usual capacity of resisting those forms of disease which operate by depressing the powers of life, such as cold, malaria, infection, etc., there is, at the same time, a predisposition to suffer at once from causes of additional excitement. A brain already over active from hard study or other exciting causes, may be too easily brought up to the stage of a dangerous inflammation, by the additional aid of a strong moral or mental emotion.

Proclivity to disease is often caused by previous disease, hidden, it may be, independently of its weakening influences. This is particularly the case with some forms of inflammation and nervous diseases. Thus, a child that has once had croup is very liable to a recurrence of the difficulty. An attack of enteritis, or tonsilitis, is apt to lay the foundation for succeeding attacks. Such convulsive diseases as chorea, hysteria and epilepsy, are extremely liable to recur, and they are ever ready to appear in full violence, on the application of any exciting cause, such as the various injuries the surgeon is called to heal. There are also constitutional predisposition to disease, which is not to be ascribed to a previous attack, but to the persistence in the system of a condition favoring that attack. Rheumatism, gout, gravel, many cutaneous diseases, dropsy and jaundice, are examples of this tendency. A person who has once suffered from any of these diseases, is liable to a recurrence of the same on the application of an exciting cause. Although free from the attack, he may not be free from some functional or structural imperfection, which caused the previous attack, or results from it, and which is easily brought into operation by the addition of an exciting cause, or an outside stimulating influence. There is to be found, also, a predisposition to many structural diseases, such as tuberculous and malignant formations. Where such have once appeared, there is generally a tendency to their reproduction. Sometimes this influence is very strong, though latent until brought out by an exciting cause.

There may be actual disease already existing in the body,

even when altogether beyond the closest observation of the most skillful, that predisposes to other disorders, independently of its weakening effect. Structural lesions of the heart and liver, tumors, ulcers, aneurism, frequently induce obstructions and irritations of blood-vessels, which, though not themselves causing open disease, render these organs, thus affected, rife for its development, on the supervention of an external excitement. Disease of the heart, by causing an accumulation of blood in the veins, often leads to congestion of the lungs and liver, and sometimes other important organs; and though unknown before, it only requires the additional influence of an outside or exexciting cause, like a concussion, contusion or fiacture, to bring about an attack of asthma, jaundice, or even death may supervene from these occult causes, first brought to light by the accident or injury, but for which the patient would have experienced but little difficulty and no danger, and the medical attendant would have had no trouble with the case.

To these accidental, or acquired predisposing causes, are to be added those which are born in the individual, and those which arise from the circumstances of age, growth, etc. These, depending upon something defective or ill-balanced in the organization, are developed only when wrought upon by an external exciting cause.

Hereditary tendency to disease is one of the most certainly established facts in pathology; yet its operation and manifestations are most singular and uncertain. The surgeon and the physician are constantly on the look-out for the manifestation of this influence, and yet they are often deceived, failing to trace it when it is alive and active, and also liable to meet it where they have reason least to expect it. This tendency may exist in a family attended by the same medical man for years, and he may not be able to detect it, until brought out by some sudden, severe accident. Nothing is better understood, by both the professional and the unprofessional, than that scrofula, gout, rheumatism, epilepspy, mania, asthma, blindness, syphilis,

deafness and consumption, run in families—that they are transmitted from parent to offspring, from generation to generation; yet its appearance is very uncertain, both as to time and the number of the family affected with the disease of the parent. Part of the children may be affected, and the others manifesting no appearance of the peculiar diathesis; in fact, it may pass over whole generations, or remain in an occult state, and then again be developed in precisely its original character and violence.

How, then, can the surgeon count on, or be prepared to counteract this hidden, yet terribly potent and dangerous influence? In constitutional syphilis, a first-born child of parents, one of whom has been infected, may be tainted with the venereal poison, while the second is apparently sound, the third or fourth again may be affected, and the next appear well. In this way a disease may go on from generation to generation, or it may stop short at one. Again, the hereditary influence is greatly modified by sex; the females being attacked with one form of disease and the males another—another of a different character altogether. This phenomenon results, undoubtedly, from a double influence—one section of the family deriving it from the mother and the other from the father. This hereditary influence is seldom developed in infancy, but more frequently in after life, being developed by growth and the *accidents* of life. The parent has the disease in middle life; the son, by living freely, may get it sooner, or, by good luck, good care and temperance, it may not appear until advanced life, or not at all. There is a disease transmitted from the father to the son, but remaining dormant forty or fifty years. So irregular is the development of hereditary disease, that the child may be affected before the disease has shown itself in the parent. The children, one after another, are affected, and afterward the parent shows that an anticipatory action is exercised in the offspring. A case is recorded where the parents were, apparently, healthy, but the children, one after the other, died at the age of nineteen of consumption; after-

ward, and at the age of fifty-three, the mother died of well-marked tubercular pulmonary disease.

Temperament consists of a predominance or defect of some function or set of functions—the active or the sanguine, the slow or phlegmatic, the melancholic or desponding, the nervous or irritable temperaments—all tend, in different directions, to complicate particularly the treatment of injuries, as well as acute disease generally; then all these temperaments are mingled and intermingled, so that a pure type of the different temperaments is comparatively rare. Age, also, is an important cause tending to vary the result of medical and surgical treatment: the proclivity to disease being very different in early infancy from what it is at puberty. Adult age again affords a condition of physical habit differing, not only very essentially from infancy, childhood and puberty, but from old age. In infancy, the low caloric powers of the body dispose it to suffer from the bad effects of atmospheric influences; hence the tendency to visceral inflammation. The skin is liable to exception, in consequence of the drying medium in which it is placed, and its general tenderness and irritability. The virgin state of the alimentary canal renders it peculiarly liable to disease. The brain, excited by the novelties of a new world, is rapidly developed, and in its rapid change and increased activity, it is peculiarly exposed to a morbid action. Teething adds another, and a very serious one, to the many causes of irritability and danger in infancy. When an accident overtakes a child, each and all of these existing causes tend greatly to complicate, retard and embarrass the case. In children the functions that administer to growth being in great activity, the organs of digestion and assimulation are, therefore, most obnoxious to diseased action when excited by outside causes. Puberty brings with it strong susceptibilities, and alterations in the constitution, chiefly in the female sex; menstruation is to be established, and many and serious are the evils resulting from external causes, which check the development of this function—it having a nervous, as well as a vascular relation. It, therefore,

plays an important part in surgical cases. At this time, in both sexes, the system undergoes great and important changes. The glandular system is extremely liable to congestion and inflammation; tubercles are rapidly developed in the lungs, and these organs are much disposed, at this period, to take on inflammation of their substance and mucous membrane, when aroused by an injury. At the termination of growth there is another critical period: the cessation of that appropriation of nourishment for the increase of the body that had hitherto been going on, may cause fullness of the vessels, and a disposition to hypertrophy, hemorrhage and inflammation, in the most healthy; and in the chachectic, to morbid disposition, especially of the tuberculous kind. The buoyancy of animal spirits, and the impulsive energy of youth, do not always indicate immunity from disease. An acute disease or an accident, at this particular time, is attended with more danger, and less under the surgeon's control, than if this stage is passed.

Very peculiar difficulties attend the treatment of surgical cases in old age. The joints stiffen, the textures of the body change, owing to the altered vascular action in the different parts of the vascular system, the capillary blood-vessels, that great system which supports and sustains life and strength in the body. The blood abounds in the large vessels, causing congestion and inflammation. Chemical transformations show themselves in deposits, and the like, in different parts of the system, from the heart, the great center of life, to the most distant extremity. The active functions of the system being thus paralyzed, the healing process goes on, if at all, at a slow, unsteady and imperfect pace.[1]

These are some of the causes—not all—that trouble, perplex and complicate the practice of the surgeon and physician; and it seems, therefore, important that not only should the surgeon be able to

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[1] For this analysis I am principally indebted to the "Principles of Medicine, Comprising General Pathology and Therapeutics, Etiology," etc., by C. J. B. Williams, M. D., F. R. S.

thus vindicate his practice and account fully for the uncertainty of his science, even under apparently favorable circumstances, but the lawyer, also, ought fully to comprehend all the embarrassments and impossibilities that environ a noble sister profession.

If the lawyer is clearly satisfied of these difficulties, as he certainly will be, by looking into their causes, very much vexatious and ruinous litigation will be prevented, and intelligent, worthy men left unmolested, to pursue untroubled their important professional duties.

The doubts and uncertainties that constantly embarrass the medical and surgical practitioner are easily understood and appreciated by the intelligent; and the errors and mistakes to which they are thus unavoidably exposed may well furnish, in many important cases, a satisfactory explanation and excuse for any unfavorable results, which, upon their face, may appear to involve want of skill or knowledge.

But there are still other equally formidable difficulties connected with the practice of surgery—difficulties which, if properly understood and appreciated, will tend to place in a truer light the strong and generally unknown barriers that are constantly confronting those who pursue the art.

The great difficulties and want of certainty in the practice of medicine and surgery, resolve themselves into an apparent want of that uniformity so beautiful and remarkable in other branches of physical science. This is felt particularly in the effect of the predisposing causes already mentioned, to wit: morbid action, the course of actual disease, and in the effect of external cause—our confidence in science depending upon the facility with which we discover the true relations of things, and our confidence in their uniformity. In those sciences in which we have to deal with inanimate matter, the confidence is easily attained; but in medicine, particularly, and often in surgery, there is great difficulty in tracing effects to their true causes, and causes down to their true effects.

There being so many latent influences—some of which have

been pointed out—operating to vary and complicate disease, just and exact results are arrived at very slowly, if at all, and a long course of observation and experiments must precede even a tolerable degree of certainty. There is great danger, too—and it is often felt—that imperfect and hasty conclusions will be announced as facts.

When a statement of facts has once been boldly set forth from a high quarter, it may take a long time, and a laborious course of experiments and observation to correct the errors. Herein is the great difference between the science of medicine and those purely physical; as, in the latter, a single experiment may be sufficient to overturn the most plausible hypothesis, or establish one that was before only matter of conjecture. After we have ascertained, by a course of long, close and logical reasoning, and careful experiment, the true tendencies and relations of things, all are constantly liable to disappointment, when we attempt to produce certain results by bringing these tendencies into operation. This arises from the silent operation of those numerous causes referred to, that vary and qualify the result, and not easily detected. ABERCROMBIE, from whom the substance of the above is taken, says, a source of uncertainty in the practical art of medicine, is the difficulty we find in applying to new causes the knowledge we have acquired from observation. This application is made upon the principle of either experience or analogy.

"We are said to proceed upon experience when the circumstances in the new case are the same as in those cases from which our knowledge was derived. When the circumstances are not the same, but similar, we proceed upon analogy, and our confidence in the result is weaker than when we proceed on experience. The more numerous the points of resemblance are, the greater is our confidence; because it approaches the more nearly to that which we derive from experience; and the fewer the points of resemblance, the confidence we feel is more and more diminished. When, in the practice of medicine, we apply to new cases the knowledge acquired from others, which we believe to have been

of the same nature, the difficulties are so great that it is doubtful whether, in any case, we can properly be said to act upon experience, as we do in other departments of science; for we have not the means of determining with certainty that the condition of the disease, the habit of the patient, and all the circumstances that enter into the character of the affection, are precisely the same in the two cases; and if they differ in any one particular, we can not be said to act from experience, but from analogy. The difficulties and sources of uncertainties that meet us at every stage of such investigations are, in fact, so great and numerous, that those who have had the most extensive opportunities of observation will be the first to acknowledge that our pretended experience must, in general, sink into analogy, and even our analogy too often into conjecture."[1]

In a science encumbered with so many sources of error and difficulties, it is obvious what cause we have for proceeding with the utmost caution, and for advancing from step to step with the greatest circumspection. It is in consideration of these peculiar difficulties, that beset and encompass the business of the surgeon and physician, that all enlightened courts have held that but ordinary skill and care shall be required of them, and that mere errors of judgment shall be overlooked, if the general character of treatment has been honest and intelligent; and that the result of the case shall not determine the amount of responsibility to which he is to be held; and that when unskillfulness or negligent treatment of his patients is charged to a physician or surgeon, it is not enough to show that he has treated his patient in that mode, or used measures which, in the opinion of others, though medical men, the case required, because such evidence tends to prove errors of judgment, for which the defendant is not responsible, as much as it goes to prove a want of reasonable skill and care, for which he may be responsible. Alone, it is not evidence of the latter; and, therefore, the party must go further, and

[1] Abercrombie on the Intellectual Power, page 299.

prove, by other evidence, that the defendant assumed a character, and undertook to act as a physician, without the education, knowledge and skill which entitled him to act in that capacity.[1]

It is not our purpose to enter into a defense of the medical profession, but simply to present a fair exhibit of the difficulties that surround a great profession, and with which it has constantly to contend—a profession that has for its object and end the accomplishment of great good, assuaging of pain, physical and mental, the lengthening out of a precarious life—a profession that has produced, in all ages, able, self-sacrificing men, and now has within it, as noble examples of moral and intellectual manhood—possessing substantial knowledge and practical skill—as ever blessed our earth.

We are anxious that the attorney should give the subject his attention; that he may weigh well the matter, and understand it; that he may not, unwittingly, charge the medical man, and hold him responsible for not doing perfectly what is absolutely impossible, and that he may assist the court in protecting the innocent, as well as intelligently to punish the guilty.

Let the heaviest judgment of the law be visited on those who ignorantly, drunkenly and grossly trifle with health and human life. If the practitioner has assumed the responsible duties of the medical profession without reasonable and ordinary skill; or, having those qualifications, neglects to apply them as he should, with care and diligence, under an enlightened judgment, properly exercised; in other words, if he has neglected the proper treatment, from ignorance, inattention and carelessness, let him suffer: there will be found nothing in these pages to screen him.

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[1] Leighton *v.* Sargent, 7 Foster Reps. 475.

☞ *See Appendix, page 586, for full Notes on this Chapter.*

CHAPTER III.

WHAT DEFINITE KNOWLEDGE IS POSSIBLE AND ESSENTIAL FOR THE PHYSICIAN AND SURGEON.

Having considered some of the impossibilities of medical and surgical practice—others will be noticed hereafter—it may be well to examine to what extent the surgeon's knowledge must reach—that which can and should be known to the practical medical man. The courts hold that the surgeon and physician must be master of that degree of knowledge which is reasonably within their reach. To this end a minute and correct understanding of the real character and importance of Inflammation is essential. It lies at the threshold of practical surgery; and, without this knowledge, the surgeon must grope his way in a labyrinth of doubt and darkness, and stumble when he should walk confidently.

What the terrible power of steam is to the engineer, inflammation is to the surgeon. From it he has to apprehend much of the danger to which he is exposed, and without it he can do nothing. It is the great, mysterious and ever present power of nature, that immediately springs into living activity, when any part of the physical economy is invaded by an injury from without, or an enemy within.

After the mechanics connected with surgery are attended to—which, indeed, is generally the less difficult part—if the surgeon does not act coincidently and understandingly with this influence, he had much better fall back and let this great elementary power of pathology do the work. The result will be better than if there is a blind, hap-hazard intermeddling on the part of an ignorant surgeon.

Too many surgeons seem to think the important thing upon which a surgical reputation depends, is the manual dexterity with which an operation is performed. While this should be well done, it is not all-important. A thorough understanding of the nature and tendency of inflammation, so as to both use and control it in the treatment of surgical cases, is more important. The unfortunate results that so often arise in surgical cases, frequently depend upon a neglect or misunderstanding of the general inflammation, and that of the part affected, both before and after the operation. It should not be put aside for the showy and imposing parts of the practice, which are too apt to lead the student, in particular, in that direction, to the neglect of, not only inflammation, but other things, in which, with the correct treatment of inflammation, consist the true glory and usefulness of the profession. A distinguished surgeon has said, "Not to cut, but cure, should be the motto of the surgeon."

The great operations are but seldom performed by the surgeon—the great mass of operators never performing one of the first class—while the common accidents are of daily occurrence, in the treatment of which the minor handicraft of the profession is constantly brought into requisition. In the exercise of these duties properly, the necessity of great operations is avoided. How much better to substitute simple remedies at the right time, applying the principles of hygiene to the general system—that the disease may be, in its origin, controlled, pain and danger avoided, health and comfort restored—than by the neglect of these, encourage severe and bloody operations. While the surgeon should be ready, at a moment's warning, to amputate, in a skillful manner a crushed limb, which obviously can not be saved, by reason of the extent of the injury, and for want of vitality; which, if left, must inevitably take with it the body, and thus succeeds in saving life, he has just ground for self-congratulation, and may well be proud of his art, and say that an important thing has been done. But when, in the case of an injury less severe, there is a doubt whether or not the limb may be enabled

to resist the threatened gangrene—when he hesitates not to give the patient the benefit of that doubt—when, by great patience, care and skill, he arranges the mangled fragments of bone, contused nerves, muscles and torn blood vessels, in their proper places, retains them by proper apparatus, affording due support, and without too much pressure, regulating the play of the general circulation, controlling the inflammation, assisting the efforts of the *vis vitæ*, thus averting both local and general disaster, and bringing the healthful action of the system to complete, though it may be slowly, the process of cure; and when, ultimately, a thorough and permanent success crowns such patient and anxious labors, surely there is much greater cause for being proud of his noble profession, while his own reputation, in the estimation of all the intelligent, has been raised a hundred fold. A discerning public will not fail, in the end, to award a higher and truer meed of praise in this case than the former.

The progress of surgery has been, and ever will be, characterized by a corresponding decrease of its operations, both in amount and severity. The highest qualification of a surgeon consists in such a knowledge of all the resources of this important department of medicine, as will enable him to weigh and determine, with a high degree of certainty when called to step between life and death,—between deformity and beauty—in his own scale, all the circumstances of the case, and to rightly determine, at once, whether there shall be the stern appeal to the knife, or whether the application of milder means will not bring about a happier result,—the restoration of the patient to health, with a perfect body. The knowledge which determines the necessity of a severe operation, is far more valuable and far more difficult of attainment, than that mechanical knowledge which will qualify the surgeon to perform it, after the important question as to its absolute necessity is settled. To determine the first—as to the necessity of an operation—the best qualities of the mind and heart are called into operation, in thoroughly analyzing all the elements that enter into the case—the vital forces involved in

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the economy—the condition, mental and physical, of the patient, etc., and in arriving at a true and safe result.[1] He must have self-possession, judgment, honor and independence—attributes that should carry him above those influences that would render him an instrument in the hands of others less competent than himself to foretell the consequences of a rash appeal to an unwarranted and dangerous operation, for the glory of it. "The surgeon is the agent through whose instrumentality are carried into action the highest principles of scientific medicine—principles demanding a knowledge of the soundest anatomy, physiology and pathology. He wields a power more grand, more critical, and, at the same time, more terrible to humanity, than the practitioner of any other branch of the profession of medicine. The ordinary physician's authority and prestige is, indeed, limited, when contrasted with that of the surgeon; his daily routine seems dull and tedious, while that of the surgeon, when legitimately exercised, is bold, startling and alarming: the errors of the physician are not, in general, dangerous, while those of the surgeon are fatal. Life and death hang suspended on his effort. Health, recovery, death and deformity are the issue of his hand."[2]

To be a complete master of anatomy, physiology and pathology, is indispensable to the surgeon, when we consider him in his tri-fold office of using the knife and other instruments, reducing dislocations, or adjusting and managing fractures.

There never was a more general or more baseless and ridiculous delusion than that some persons are born natural surgeons—"natural bone-setters." It has been but a very few years since it was thought necessary to go fifty miles, in case of a dislocation or fracture, after one of these celebrities. Even at this day, in some parts of the country, this error still prevails. It is a remnant of the almost universal belief, anciently, that "*la medicine est venue immediatement de Dieu.*" What is said in Eccle-

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[1] Miller's Practice of Surgery, pages 20, 21.

[2] Skey's Operative Surgery, p. 6.

siasticus was taken literally, *viz.:* "God created the physician and the physic, and that he giveth science to man, and that 'tis he that healeth man," etc.[1] Importance was given to this class of surgeons when, in fact, there was no surgery. Not over two hundred years ago was it that surgery assumed a true and definite shape; even within that time, the treatment of the most simple incised wound was cruel in the extreme. Instead of bringing the edges of the wound together, for the purpose of union by the first intention—as is the practice at the present day—the wound was opened and filled with dressings, acid balsams, tents, ashes, sugars, leaden tubes, etc., to force the wound into a painful suppuration, which was considered necessary to a cure. When a part was nearly or partially severed, instead of being united, it was cut away, even to every flap of skin; every open wound was plugged up, lest it should heal. Tents, seatons, leaden canulas and strong injections, were among the chief implements of surgery. The lips of a wound must not be put together. If the opening was not large and free, it was the rule to dilate it, but never with a knife: it was torn open with a sort of forceps; thus the most simple wounds were forced into sloughing ulcers. Long tents were thrust into the wounds of the neck and face until they were extended enormously. Compound fractures were treated by thrusting the dressings between the ends of the bones.

At one time, all wounds were treated by the process of *sucking.* In the army the drummers were the suckers. When a duel was fought—which was very common two hundred years ago—each party would take with him his sucker. His skill consisted in immediately applying his mouth to the wound, and continuing to suck and spit out the blood until it stopped, when he would chew up a wad of paper and introduce it into the wound. Surgery has, therefore, but just emerged from barbarism and superstition; yet it has made gigantic strides within the last few years. With equal progress for the balance of this century, and other shades

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[1] Ecclesiasticus, xxxvi: 12.

of chicanery and deception, that still embarrass the art, will be swept away.

This desired result will be attained by the maintenance of a high standard of anatomical, physiological and pathological knowledge in the profession; and when this is not found in a sufficient degree in the practitioner to insure safe and thorough treatment to the patient, the party should be brought to answer for any evil results of such ignorance, in a court of justice, where no amount of credit will be given to natural bone-setters, or any other class of pretenders for intuitive knowledge, aside from common sense.

No man can become thoroughly acquainted with the science of anatomy without practical dissections on the subject. He may be a good theorist without it, but he can not be a ready, practical practitioner; and he will be very liable, at some stage of his life, to be awakened to his defective education, by having to respond, in damages, for Malpractice. It being essential to the surgeon to understand anatomy—and it being impossible for him to obtain that necessary knowledge without access to the subject for dissection—it is evidently wrong for a Legislature or a court to punish the ignorant surgeon, if it has thrown around the dead body, in all cases, such barriers and penalties as will, in effect, prevent dissection, by placing the *materiel* beyond his reach.

The court should either permit the student of medicine and surgery to obtain all the subjects they may require, under proper restrictions, which need not at all cut off a supply from the right and proper quarter, or it should cease to punish those who are guilty of Malpractice, by reason of the great difficulty in obtaining subjects for dissection. There is not a lawyer, judge or juror, who would not rather have a surgeon attend him, in case of a fractured leg, who he knew had thoroughly examined and studied all the parts, injured and uninjured, on the dead subject, even if he knew such surgeon had to steal the subject upon which he obtained his knowledge.

Why, then, will this influential class throw the least obstruction in the way of the student's obtaining, in a proper manner, all the subjects necessary? It is a matter of congratulation that a great change has transpired on this subject within a few years, among the more intelligent; and the prejudice so general not long ago, is in many places giving way, and all the facilities necessary are afforded for obtaining *materiel* for dissections to the student of anatomy; still, in many places, it is almost an impossibility to obtain such *materiel* without running a risk of property, liberty, and even life.

A correct and thorough knowledge of physiology and pathology, is also based upon dissections. Plates and books do not, and it is impossible that they should, make that clear impression upon the mind, that the examination of the natural parts will leave: being seen by the eye, and examined under the microscope, the effect is lasting.

The foregoing remarks are designed more particularly for the legal profession. Their truth is well understood by all intelligent medical men.

☞ *See Appendix, page 587, for full Notes on this Chapter.*

CHAPTER IV.

MALPRACTICE FROM AMPUTATION.

NINE-TENTHS of all the cases of Malpractice that come before the courts for adjudication, arise either from the treatment of amputations, fractures or dislocations. It becomes necessary, therefore, to examine these subjects, to ascertain if possible, why it is, that in these particular departments, the surgeon is so liable to encounter litigation, and also to determine what he can be justly expected to do, and what may be impossible for him to accomplish.

The latest and ablest surgical knowledge, as held, illustrated and practiced by those who are best acquainted with the present state of the science, must be appealed to. They are the acknowledged judges of the practicable and the impracticable, in the practice of surgery. The members of the legal profession, absorbed, as they are, in the study of their own infinite field of investigation, belonging to their own great science, have not turned aside to explore another—the medical—equally interesting and important; but this they must do, if they would prepare themselves to mete out justice, both to the ignorant patient and the enlightened and honorable physician, or surgeon, and follow the dishonest charlatan, or the recklessly ignorant quack, with the merited penalties of the law. The standard of ordinary skill, which is required of every physician and surgeon, it will be borne in mind, is that degree and amount of knowledge and science, which the leading authorities have pronounced as the result of their researches and experience, up to the time, or within a reasonable time before the issue or question to be determined is made. It is not enough for a surgeon to plead that his treat-

ment was that taught him by the ablest members of the profession, and the best schools twenty-five years ago; because, in a science that is advancing with the rapidity of medicine and surgery—that is, by observation and experience, yearly, and almost daily, correcting errors in practice, and abandoning hoary-headed theories, the fallacy of which has become apparent, upon which the practice has heretofore been based—that is receiving auxiliary agencies from all the rapidly advancing sister sciences,—there will be new facilities afforded in practice year by year, and errors constantly exploded. The authority, therefore, that was at a previous day considered good, and upon which the courts acted, may not, at this time, be admitted as the present standard of knowledge required of the physician and surgeon.

In no department of surgery, perhaps, has there been a greater change and advancement in treatment, than in that of amputations. An amputation that would have been justified by the rules of surgery, and the operator protected in court, twenty-five years ago, or even within less time than that, would now be repudiated by the best authority, and the operator justly chargeable with ignorance and unskillfulness.

Old physicians and surgeons can not, therefore, rely with safety upon their elementary education, and what they may have learned in practice. It is absolutely important, for the protection of the patient as well as of the surgeon, if he assumes the responsibility of performing an operation fraught with so great interest, that he should make use of every reasonable means of knowing what is considered the best treatment at the time of the operation—not what would have been the proper course twenty years ago.[1] A medical man can not, with any safety or propriety, practice, year after year, without keeping himself informed as to the improvements of his science, especially if he practice surgery, involving amputations, from which so many law suits result, and which are so fatal to the patient.

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[1] McCandless *v.* McWha, 22 Penn. 269.

The surgical statistics of Malgaigue, Lawrie, Simpson, Phillips and others, show that nearly one-half of the patients in the severer forms of amputation die; thus completely showing the great severity and danger of the operation, connected, as it is, with original disease, or shock to the general system.

So valuable is a leg or arm to its possessor, that all the circumstances attending its loss are always critically, and often savagely, reviewed, as soon as relief from pain and danger will permit; and in proportion to the consequences involved, is the subsequent danger of trouble to the surgeon. Amputations are now much less frequent than formerly, and the true surgeon is beginning to understand that there is more honor and skill displayed in saving a limb than in cutting it off. He is impressed with the fact that the dismemberment of a limb is his last resource, and an evidence of his weakness—his inability, by the resources of his art, to save it.

The change that has taken place on this subject, and the true doctrine at present, is so clearly and truly set forth by a very eminent surgeon of England, (Mr. Skey,) we quote what he has to say upon the subject. He says: "Strange is it, that this power of mutilating the human form—of incapacitating the individual for a large number of the duties of life, and of estranging him from former occupations, which, in some form or other, alienates him from the society, from the amusements, at least from the pursuits of his fellow-men—should be classed among the most triumphant deeds of the operating surgeon, while it practically illustrates, at the expense of his patient, the poverty and the incompetency of his art. There is no operation in the whole range of surgery, compared to that of amputation, that should claim the previous exercise of an equal amount of skill, of patience, or the decision on which demands so large an amount of conscientiousness. The most experienced are yet students. As years roll on, cases of improvement occur in our history, which teach us that the advanced knowledge of this year would have rendered unnecessary the operation of the last. Within my own

recollection, the operating theater of St. Bartholomew's Hospital was the scene of weekly mutilations of the frame by the knife, while, at the present day, a little more than a quarter of a century, such operations are reduced to less than half of their former number.

Whence this improved and improving condition of the pauper occupants of this single hospital? In the advance of scientific knowledge—in the increased power of contending against disease—in a fuller reliance on nature's power and disposition to cure it; in other words, in a higher-classed surgery; and, I may add, in an advanced sympathy with the sufferings of humanity; and not the least in this category, is the newly-acquired rank of *curative* surgery, which has all but exploded the false eclat incidental to the functions of the operating surgeon, recklessly resorted to on all occasions, having a show of reason. The most discreditable operation in surgery is an amputation. It might almost be expected that dexterity in its performance implies a frequent, and, if so, an unnecessary resort to it. The important fact should be ever kept in mind, that there is no uniform standard of curative power: a limb that is amputated in one institution is preserved in another. Experience in the treatment of disease, greater care, a patient watchfulness, a high-minded humanity, which identifies the sufferings of others with our own—these are the resources of the first-rate surgeon, and the safeguard of the patient. How often do we lose sight of the necessity of an amputation in the dexterity of its performance, and forget the suffering and deprivation of the patient, in our admiration of the manipulative skill of the operator! A decision on the question of amputation of a limb, in a large number of examples, demands the exercise of the very highest resources of surgical skill; and there is, to us, no better evidence of the high standard of surgical superiority, in any institution, than the unfrequency of the resort to amputation.

The operation of amputation is resorted to both in the case of injury and of disease; and in both, the removal of the limb is, at the present day, comparatively rare. The resources of an im-

proved art are successfully applied to the treatment of *disease;* while we are taught by experience and by reason to place a fuller reliance on nature for the cure of *injury.* Let us hope that we have not reached the final goal of our improvement, but that we rather extend our confidence yet further in the resources of nature, trusting that the advancing knowledge of the present enlightened age may yet tell profitably for the unfortunate victims of disease, hitherto deemed incurable, and limit our resort to an operation, the frequency of which has ever stamped the records of barbaric surgery, and which yet exists as the opprobrium of the art. Let us not forget that the aim of surgery is to preserve, and not to destroy; and that more real superiority is exhibited in the successful application of skill that retains a limb, than in the dexterity, however great, with which it is severed from the rest of the body.

In order to justify an amputation, whether of a part or of the whole of a limb, the question of recovery by other means must be placed beyond all reasonable doubt. Every resource compatible with the means of the patient, should be exhausted; and a consultation with one or more eminent surgeons of the neighborhood be held; and in the case of the proposed removal of a limb, the necessity of this final crisis should be clearly established. Then, and not till then, should amputation be resorted to. Presuming that every expedient that skill can suggest has been adopted, and without success, the amputation may be performed.

It is not intended, however, in any remarks that have been made, to underrate the importance of this operation, to which thousands are indebted for a prolonged life of activity and usefulness to their fellow-creatures, or to undervalue the dexterity of its performance; and so long as these pretensions to a superior merit follow in their legitimate position, the higher attributes which should ever attach to the curative power, they may be, unhesitatingly, acknowledged to be not only valuable, but to be indispensable to the reputation of a first-rate surgeon.

Amputations are requisite to preserve life from the consequences both of disease and injury. Any disease that is incurable, and the presence of which in the system is a source of such evil or discomfort as to render the loss of the limb desirable or beneficial to the patient, fully justifies the operation. It is important, however, to distinguish between the warrant of a necessity emanating from *physical*, and that from *moral* causes.

The latter, known under the term amputation of expediency—in the French school, amputations *de complaisance*—are justly regarded with an eye of doubt and suspicion, and should be undertaken with much hesitation.

Under examples of *disease*, resort is had to amputation of a limb in cases of incurable disorganizations of joints, in gangrene of the extremities, in malignant growths or tumors, in copious hemorrhage, the source of which can not be discovered, in extensive necrosis of bone, in a constitution reduced to a state of great weakness; and occasionally in incurable diseases of the skin. In fact, it is resorted to in any form of disease of the extremities, which, being either very difficult or impossible to cure, draws so largely on the circulation, and hence on the nervous system, as to endanger the present or future health of the person thus affected. In examples of *injury* from violence, it is proper to resort to amputation in severe compound fractures, in greatly comminuted fractures, in which the limb has been crushed under the application of a heavy weight, and in extreme cases of irreducible dislocations, and, lastly, in distortions, comprising operations of expediency.

It may be well to analyze these various forms of apparent warrant for amputations.

First, with regard to the disease of a joint, the most important question that arises, is that of incurability. This fact must be clearly established by incontrovertible evidence; every means and appliance that science and art can command, should have been exhausted, without permanent benefit to the afflicted joint, unless there was immediate danger. The judicious resort to

absolute rest, local depletion, proportioned in quantity to the strength of the person, counter-irritation, in its various forms, local vapor baths, must have failed to mitigate the evil. Disease has so far triumphed the joint is destroyed, suppuration has been established within its cavity, the ligaments have separated from the bone, the cartilage is partially or wholly absorbed, and the ends of the bone palpably grate against each other. Is this condition of the joint a warrant for amputation, without further reliance on the resources of nature? Certainly not. Joints are especially sensitive to the consequences of injury or violence, so long as they possess, and can exercise the prerogative of health. The joint, destroyed by the absorption of its cartilage and the separation of its ligaments, no longer possesses such powers; and though lost forever as a movable articulation, may still retain a useful existence as an immovable one. Its peculiar susceptibility being exhausted, which in health renders the exposure of its cavity at all times dangerous, the cavity, distended with puriform, or whey-like fluid, should be opened by a free incision into it, and the contents evacuated. Tractability of the diseased actions will often follow this comparatively simple expedient, and the limb be saved. This operation has, on sundry occasions, been performed with great advantage, where it has been deemed advantageous and proper to try and save a limb that would otherwise have been removed. In the year 1838, the leg of a young woman was about to undergo amputation, on account of a disease of the knee joint, of many months' duration. She had suffered a good deal of pain while the diseased actions were going on in the joint, and no doubt was entertained that the cartilage was destroyed; obscure fluctuation was felt on each side of the patella. I requested permission to take charge of the case, and passed a lancet into the joint, on the inner side of the patella, through which about an ounce of whey-like fluid escaped, greatly to her relief from suffering. Within a week I made a second opening, with the same result, and this I repeated six or seven times; all pain then subsided, anchylosis followed, and the girl

left the hospital, at the expiration of six months, with a stiff knee, but with a useful limb. The same result followed this treatment, in the case of a man I attended with Mr. Lobb, of Aldersgate street, whose knee had been previously condemned to amputation.

Mr. Gay has also adopted this practice, with considerable success, in several joints, in the knee, the ankle and the elbow. All these cases consisted in a diseased condition of the synovial membrane, with abscess, such as, indeed, would formerly have appeared to justify the question of amputation. In each case large incisions were made into the joint with perfect success, and anchylosis was the result.

Matter, penned up within the joint, is a source of great irritation at all times, and although its presence would, perhaps, hardly justify the indiscriminate resort to puncture—for I am by no means convinced that the process of recent suppuration is incompatible with perfect recovery of the articulation—yet in the last stage of the disease, in which the joint is thoroughly disorganized, there can be no valid objection to the adoption of this treatment, for it is obvious that no harm can accrue to the structure of a joint, an incision into which would be in no greater degree injurious than in any other region of the body. I believe that a free incision may be often made with advantage, even when matter is not penned up. The size of the incision into the cavity of the joint should depend on the more or less advanced condition of the disease. In early suppuration, especially if the result of accident, or consequent on the removal of loose cartilages, of which I have seen several recent examples, a moderate-sized opening will suffice.

Grating of the opposite surfaces of a joint is often urged as an excuse for removing by amputation. But the destruction of the cartilages, although one stage in the diseased actions, advancing toward disorganization, is equally to be regarded as a condition essential to recovery by anchylosis, and, if taken by itself, forms no justification at all for removal, to say nothing of the possi-

bility of the subsequent investment over the surfaces of the bone of ivory deposit, as it is called.

In recommending the frequent adoption of this practice, prior to amputation, for diseased joints, I am aware that I may be met by objections, founded on the prevalent opinion, that the strumous affection of the joints, to which the term white-swelling is absurdly applied, (in deference to an antiquated pathology,) is insusceptible of the adhesive action we term anchylosis.

But I am acquainted with no evidence that warrants this conclusion, supposing pains be taken to remove all sources of local irritation, and to invigorate the system; though I do not pretend to say that such cases give promise of success with the former. I have unbounded faith in nature's own resources, and in her good will to remedy the ill consequences of disease; and I have no doubt that, under circumstances not unfavorable, a sufficiently strong union by anchylosis, or by a fibrous substitute, would reward the surgeon for his experiment.

With these considerations before us, I may venture to conclude that the amputation of a limb for a disease of a joint ought to be deemed a rare operation, and, more especially, when disorganization has resulted from synovial disease.

Secondly. In the case of gangrene of a limb, amputation is occasionally resorted to. In the dry gangrene of old age, the early resort to removal by the knife is contra-indicated by the experience of all good surgeons: the very nature of the disease precludes the hope of recovery from the operation, if performed during the period of progressive advancement. Under these circumstances, we have no alternative but that of waiting the gradual separation of the dead parts, and then sawing through the bone, and making the best stump compatible with the difficulties of the case. Should, however, the diseased actions subside, and give place to a regenerated power in the circulating system of the extremity—indicated by a positive separation of the dead from the living parts, and by the presence of healthy granulation—there can be no objection to the operations. These objec-

tions to the operation do not, of course, apply to that form of gangrene resulting from traumatic causes, in which all the structures of the limb are involved, and in which the circulation is vigorous, and competent to the adhesive process.

Thirdly. The same remark may be made in cases of malignant diseases; in many forms and localities of which, with such tenacity do they cling to the system, once invaded, that a question might be raised as to their expediency, especially if evidence be found on inquiry, of the existence of disease about the trunk; unless the disease be entirely insulated by amputation, at a distance above it, and often if apparently insulated, the operation will prove futile. The discovery of chloroform is, perhaps, the best justification.

Fourthly. Copious hemorrhage, the sources of which can not be discovered. This description of injury was formerly the fruitful source of amputation of a limb, which has happily been rendered a rare occurrence, consequent on a more intimate acquaintance with the relative anatomy of the arterial system. Modern surgery presents so many resources, even beyond that of tying the wounded vessel, that the highest discredit would attach to any surgeon, at all familiar with the use of the knife, who should resort to the removal of a limb, before he had explored and examined every possible source of hemorrhage. Still, we can not contend against the evil consequences of the irregular distribution of vessels; and should hemorrhage continue in such a case, after the main artery of the limb was tied as closely as possible to the place of injury, and in spite of pressure and position, then, undoubtedly, we may be justified in resorting to amputation.

Fifthly. Extensive necrosis of bone in a greatly weakened constitution. It is not easy to imagine a case of necrosis, at the present day, that would justify the amputation of a limb; because, if a patient be so greatly reduced to a condition of weakness, as to preclude the direct removal of the dead bone, *a fortiori*, he can not be in a condition to justify amputation. The resort

to amputation, in cases of diseased bones, has become still more rare since the introduction of chloroform, which has exercised a most beneficial influence over the treatment of this and all similar diseases. Patients formerly lay in our public hospitals for six or nine months, or longer, for the purpose of undergoing the process of removal of the dead bone by internal agency, who now, under the influence of that invaluable agent, are brought at once to the operating theater. In the course of last summer, I removed a considerable piece of the tibia from a patient in St. Bartholomew's Hospital, who, I believe, prior to the introduction of chloroform, would have occupied a bed for many months, before he could hope to have been in a condition to have resumed his occupation.

Sixthly. Ulceration of the skin, under circumstances of peculiar obstinacy, have occasionally appeared to warrant the recourse to the amputating knife. In such cases it would, I conceive, be more consistent with scientific surgery to cauterize the surface, than to amputate the affected limb: better to expose the muscles to the chance of their consequent destruction, were that necessary, than to remove the disease by amputation.

Seventhly. Perhaps the most frequent warrant for the amputation of a limb is that of severe compound fracture, or other form of local injury, by which its structure is so extensively torn or destroyed, or likely to be destroyed, in the necessary consequences of the injury, as to point to the great probability that the constitutional powers of the individual will fail in the contest and death result. Under such circumstances we take off the limb. Unhappily, however, we possess no certain gauge for vital power, and we can arrive at no certain knowledge of the full extent of the injury done; yet, it must be allowed, that limbs are preserved at the present day under frightful injuries, that would have been formerly amputated without a moment's hesitation. It would be needless to attempt a general rule, unless we could obtain a perfect knowledge of the extent of the injury; and this is often impossible. Scarcely any amount or form of fractured bone,

alone, would justify the immediate resort to the knife, if taken singly, even supposing the bone fractured extensively into a large joint, for, in such a case, although anchylosis of the joint would probably occur, it would prove a lesser evil than that of amputation. Superadded to a compound or comminuted fracture of bone, the injury may be rendered yet more serious by the extensive laceration of the muscles. In considering this latter condition, much will depend on the kind of laceration—whether the muscles are merely cut asunder, or whether contused and torn; and whether this injury involves a few only, or a majority of the muscles of the limb. Again, we must examine with great care the condition of the vessels. Is the main trunk whole, we might ask, in the supposed case of fracture of the thigh; or, in that of the leg, is the posterior tibial artery torn? This artery may generally be felt by careful examination behind the malleolus internus. Is the anterior tibial involved? The dorsal artery of the foot is generally perceptible. Is the limb colder than its fellow? Is the temperature considerably lower than the rest of the body? If so, probably one or more arteries are divided. What is the condition of the nerves? Does sensibility extend to the toes? If not, probably the nerve is divided also. Under such circumstances, we may obtain a better ground for forming a judgment on the issue, by making a slight extension of the limb, and by replacing its lacerated structures in some approach to their natural relations. If the evidence of the integrity of both artery and nerve yet fail, and the sinking temperature of the limb and the loss of sensibility continue or increase, we have no alternative but amputation.

Human nature is never without its weakness. The judge upon the bench has his prejudices and his leanings, for human judgment can never become perfect; and so it must happen in the balance to be weighed by the surgeon, between retention and amputation of a limb, that some grain of self may be involved. This weakness is not discreditable to the individual, but to the species.

The *eclat* of an operation, the natural and commendable desire to do great deeds, the desire to avail ourselves of the opportunity of instruction to others, or the still more commendable motive of insuring recovery, by a hasty sacrifice of the integrity of the frame; these, and various other agents, are unconsciously interwoven in the decisions of the surgeon, as to his conduct and management of a case. If against such influences as these, a higher standard of professional superiority were established as our guide, based on the soundest physiology, and a yet sterner view of the moral responsibility of our decision—if it should ever become the boast of our profession, not that we have amputated so many limbs, but that we have rescued so many from the knife, then I can not but express my conviction that the resort to this operation would be yet more rare than it is even in the present era of enlightened surgery.

If a doubt exists in the mind of the surgeon, on the necessity of an immediate amputation, there is less objection to giving the patient the chance of recovery, by postponing the operation, especially in cases of injury that admit of subsequent amputation below the knee, than in subjecting him to the consequences of unnecessary mutilation.

Death is, comparatively, unfrequent in consequence of amputation below the knee; while, to any ordinary mechanic, the loss of a leg is as fatal to his future employment as that of a portion of the thigh in addition. Mr. ABERNETHY entertained a strong objection to amputation for compound fracture in the neighborhood of the ankle joint. Possessing a greater than the average confidence of the profession, in nature's power and good will to cure it, Mr. ABERNETHY showed his own superiority, not in his own greater curative power, but in his more profound insight into, and reliance upon that of nature.

Much has been said about the necessity of immediate amputation after compound fracture, etc. The argument for this necessity is founded on the evil of a second shock to the system; but this principle, although good in the abstract, is often mis-

applied, and as often violated, even by what is called immediate amputation. The principle originated from the surgical practice of the battle-field, in which a wounded soldier is brought from the ranks and placed under the hands of the surgeon, either immediately or within a short time of the occurrence of the wound; but the case is different, both in private and in hospital practice, in which some hours from the period of the accident may elapse before the arrival of the surgeon; and I am inclined to believe that, for the most part, the condition of a person with severe compound fracture is as favorable for amputation after the expiration of thirty-six, or even forty-eight hours, as at the expiration of three or four. The principle itself is sound, if strictly obeyed; but its rigid observance is incompatible with the ordinary duties and occupations of the surgeon, whether in private or in hospital practice; and I consider that the postponement of all doubtful cases of severe injury to one or two days' experiment, is more consistent with the principles of a higher-classed surgery, than the loose obedience to a law, which, however abstractly good, is incompatible with the necessary requisitions of professional life. This argument obtains additional force from the fact that the error, if any, is committed on the side of humanity.

Eighthly. We may be compelled to resort to amputation in extreme cases of irreducible dislocations; but to justify the appeal to the knife, every means should have been exhausted, both ordinary and extraordinary. The failure of the usual means of extension, should only dictate the resort to unusual means. We must sacrifice the joint for the sake of the limb, as we sacrifice the limb for the preservation of life. The joint should be carefully surveyed, for the purpose of ascertaining the nature of the difficulty and its precise locality. Anatomical knowledge of the joint is here invaluable. The cause of these difficulties in the reduction usually depend on the displacement of some partly-torn ligament, or tendon, distorted from its course during the accident, but far more generally on the former. Whatever be the obstructing agent—be it ligament, be it tendon, or be it muscle—

it should be divided by the means of a fine-bladed knife, passed down to it. If necessary to this important object, the skin should be dissected off, to an extent sufficient to expose the cause of obstruction; but this, of course, is better avoided, if possible. If this principle be fully carried out—if the surgeon resolve to sacrifice the joint, or rather to risk the destruction of the joint, as a movable articulation—amputation will be rarely resorted to in cases of irreducible dislocation.

With regard to operations for distortion, etc., or operations of expediency, as they are somewhat inappropriately called, I have only to remind the readers that they are often followed by serious, and even dangerous results, as, indeed, are all large operations, performed during a condition of the nervous system unprepared for the shock, that they should rarely, if ever, be recommended, and not always resorted to on importunity."[1]

So important is the subject of amputation considered, as connected with Malpractice, that the views of one of the ablest and most successful of British surgeons have been here given at considerable length. The statements are so clearly and compactly expressed, and at the same time so true, that they can not fail to place the subject in its true light. The line is drawn in so distinct a manner, all physicians, surgeons and lawyers, can at once, from the rules laid down, see some of the reasons for, or the improprieties of, an operation of this magnitude, when the facts are once fairly before them.

Unskillfulness can not be charged upon the surgeon who follows these highly humane, enlightened and progressive views. It is an easy and tempting matter to perform heavy operations like amputations. The surgeon has, therefore, much reason to be cool, cautious and deliberate, on such occasions, remembering that it requires more ability and medical skill to save a limb than to cut it off; as it requires a higher degree of legal knowledge in a lawyer to gain a difficult case than to lose it.

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[1] Skey's Operative Surgery, page 291.

Although this is so plain, upon reflection, it is still almost the universal sentiment, that he who has amputated a limb is a better surgeon than he who has, by assiduity, patience and skill saved one; and the former is not so likely to be followed by a law suit—though he does not always escape—whether right or wrong, and will realize, generally, an extended practice, by reason of the boldness of his operation; while the latter is in danger of litigation, without the benefit of a reputation, should he escape an action for damages.

ADJUDICATED CASES.

The reported cases on the subject of Malpractice are few, as they but seldom reach the Supreme courts.

A leading case, on some points connected with amputations, may be found in Howard *v.* Grover.[1] This was one of the cases against the defendant for alleged Malpractice as a surgeon, and was tried upon a plea of the general issue, WHITMAN, C. J., presiding, at the November Term of this Court, 1847. The jury returned a verdict in favor of the plaintiff, and assessed the damages at $2025.

The defendant moved for a new trial, because the damages were excessive, and because the verdict was against the evidence. The defendant afterward filed another motion to have the verdict set aside, because he had, since the verdict was rendered, discovered new and important evidence, the existence of which was unknown to him at the time of the trial, to wit: That the *periosteum* would reproduce itself.

The testimony given at the trial was all reported, and certified to be a true report by the presiding judge.

The motions were argued by *Codman*, for the defendant; and by *Howard & Shipley*, for plaintiff.

The counsel for the defendant cited Rev. Stat. c. 123, sec. 1; 17 Pick. 471; 12 Johns. R. 234; 3 Pick. 385; 4 T. R. 687; 5 Taunt. 280.

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[1] Howard *v.* Grover, 28 Maine R. 97.

For the plaintiff were cited the following: 17 Maine R. 247; Cowp. 230; 2 Wils. 244; 4 T. R. 687, cited for defendant; 3 Pick. 113 and 379; 7 Pick. 85; 9 Johns. 45; 9 Wend. 470; 16 Maine R. 187; 22 Maine R. 252.

The opinion of the court (SHIPLEY, J., concurring only in the result,) was drawn up by

WELLS, J.—This case was tried at the November Term, 1847, and a verdict was rendered for the plaintiff for $2025. The defendant was charged with Malpractice as a surgeon; and he moves for a new trial because of the discovery of new evidence, and of excessive damages.

The gentlemen, by whose testimony the alleged newly-discovered facts can be shown, all resided in Portland, where the trial was had. No measures were taken to procure their attendance. By the use of ordinary diligence, the defendant could have ascertained the facts to which they are able to testify. If his knowledge of surgery was less extensive than theirs, by inquiring of them, the information which they possessed could have been obtained. If any witness had stated that the *periosteum* had not the power of reproduction—although no such evidence appears in the abstract furnished to the court—information on this subject could have been presented by consulting works on surgery, or the gentlemen by whom it now appears, such an error could be corrected.

Parties are expected to exercise due diligence in preparing their causes and in producing testimony, and the omission to do so does not lay the foundation for a new trial.

There is nothing in this part of the case, which would authorize us in disturbing the verdict.

Are the damages excessive, to such a degree as to require the interference of this court?

It is always a delicate undertaking to set aside a verdict on account of excess of damages, especially in cases where the rules by which they are to be measured are vague and uncertain. The power to do it is recognized in many cases, to some of which we

refer: Chambers *v.* Caulfield, 6 East. 245; Coffin *v.* Coffin, 4 Mass. R. 1; Bodwell *v.* Osgood, 3 Pick. 379; Worster *v.* The Canal Bridge, 16 Pick. 541; Blunt *v.* Little, 3 Mason, 102, which was an action for a malicious prosecution—the verdict being for $2000 damages, was directed to be set aside, unless the plaintiff should remit $500 of his damages; Wiggin *v.* Coffin, 3 Story's R. 1, which was also an action for malicious prosecution. In the case of Jacobs *v.* Bangor, 16 Maine R. 187, it is said that when there is no certain measure of damages, the verdict of a jury is not to be set aside for excessive damages, unless there is reason to believe that they "were actuated by passion, or by some undue influence," perverting their judgment. It is unnecessary to refer to that class of cases where verdicts, in relation to property and injuries to it, have been set aside and new trials granted.

Honest and well-meaning men are liable to be led astray by strong feelings of sympathy, arising from a narration of painful and protracted sufferings, and while thus excited, often inflict upon the author of them a severer punishment than he deserves.

It is not alleged against the defendant that he was ignorant of the duties of his profession, or that he willfully and intentionally departed from them. It is true, that his conduct was not guided with sufficient deliberation, and he relied with a confidence too strong upon his own judgment.

The plaintiff had been lame for several years; his thigh bone was diseased. It is not denied that, in 1843, an amputation was necessary, to arrest the progress of the disease. In that year the defendant performed two operations upon the plaintiff's thigh, by amputation. The first was unobjectionable as to the place of amputation, but the bone was left protruded too far from the muscular parts.

The ground of complaint is, principally, for the second, that there was an error in not cutting off the limb nearer to the body, and want of care and skill in the mode of execution. But it is not shown that the plaintiff sustained any material injury; the mere

mode of execution, although it did not accord with the most correct and careful practice.

But as soon as the second amputation took place, it was apparent that the bone was infected above the place of amputation. The plaintiff could not then bear another operation. The caries continued to increase in virulence, until the whole of the thigh bone was removed from its socket, by another surgeon.

The alleged fault of the defendant consisted in an error of judgment, in not removing more of the diseased limb. It is by no means certain, that the removal of a larger portion would have been effectual. When the first operation took place, the remaining bone appeared to be perfectly sound; but in a short time the disease manifested itself in such a fearful manner as to require a second amputation. It seems, therefore, highly probable that the whole bone was diseased, and that nothing short of its entire removal would have saved the life of the plaintiff. If such was the fact, it was of little importance at what precise part of the limb, below the hip joint, the operation was performed; yet damages against him have been rendered, not because he failed to remove the whole limb, but that he should have removed a few more inches of it.

It was the inevitable fate of the plaintiff to be a cripple for life, without any agency of the defendant. The want of judgment of the latter may have protracted his sufferings, and caused an increase of expenses and loss of time.

The defendant is not liable for a want of the highest degree of skill, but for ordinary skill;[1] and, of course, only for the want of ordinary care and ordinary judgment.

The practice of surgery is indispensable to the community, and while damages should be paid for negligence and carelessness, surgeons should not be deterred from the pursuit of their profession by intemperate and extravagant verdicts. The compensation to surgeons in the country is small, in comparison with what

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[1] Sear v. Prentice, 8 East. 347; Chitty on Cont. 165.

is paid in cities for similar services; and an error of judgment is visited with a severe penalty, which takes from one a large share of the surplus earnings of a long life.

We are constrained to believe that the jury must have been actuated "by some undue influence," and that justice requires a reduction of the verdict. But we have so much reluctance to interfere with it, that we will allow it to remain if the plaintiff will remit $500 of it. If this is not done, the verdict will be set aside, and a new trial granted."

This case shows how far the courts have gone in holding surgeons responsible for errors of judgment merely.

The court admits that "the alleged fault of the defendant consisted in an *error of judgment* in not removing more of the limb;" and that "it is by no means certain that the removal of a larger portion would have been effectual," and yet allows a judgment of $1500 to stand against the defendant.

This case goes, in this respect, further than the authorities warrant. After the defendant exercised a reasonable degree of skill, under the guidance of an ordinary judgment—and it seems he had more than an ordinary judgment, from his previous operation—he was not liable for the result, however unfortunate.

☞ *See Appendix, page 587, for full Notes on this Chapter.*

CHAPTER V.

MALPRACTICE IN FRACTURES AND DISLOCATIONS.

From the treatment of fractures and dislocations, have also arisen a frightful brood of law suits. As in the case of amputations and dislocations, much error exists in the popular or unprofessional mind, as to what the surgeon can really do in the treatment of fractures. It has been generally supposed, if the patient is healthy at the time of the accident, then a perfect cure should be the result, if the treatment instituted is proper. This is another of the errors that has had a serious effect upon the profession, being often the source of ruinous litigation.

The true prognosis of fractures has not been very thoroughly understood, or at least, promulgated, by the medical profession itself, until recently. Professor John Dawson, in a Report on Surgery, to the Ohio Medical Association, says: "Deformities, shortening, etc., of course escaped the attention of no one who had any experience in surgery; yet, strange as it may seem, only an occasional hint, or some accidental remark with reference to the subject, is the most that has been recorded. No attempt upon any thing like an extensive collection of cases has been made, to state what have been the usual results of fractures; what proportion of all the cases treated has been dismissed perfect; what proportion has left the hands of surgeons imperfect, with the bone shortened, bent or otherwise deformed. When deformity has followed the treatment of a case of fracture, attention—if the trouble has occurred in the hands of an able surgeon, or in the wards of a hospital—has been directed to an imagined or real

imperfection in the fixtures used for retaining the fragments in place, and fulfilling that indication; and when it has happened in the hands of a practitioner of medicine, with an experience necessarily limited, the fault has generally been laid at the door of the practitioner, and he held responsible for the consequences. The real questions—the amount of injury sustained, the prognosis in view of this, and the imperfect means in the hands of the profession to restore order, impart primary symmetry—in short, to make a perfect cure—have, by no means, received the consideration to which they are entitled. It would not, perhaps, be right to say that these important questions have been ignored; but it is right to say that they have been neglected." He then very properly acknowledges that the profession is greatly indebted to Professor HAMILTON for his labors in this field.

Fractures but rarely call for the use of the knife in their treatment; yet the management of these injuries involves as many important principles, difficult in application, as where the knife is used. The manipulative agency of operative surgery is brought into active operation in the treatment of fractures; and if not properly applied, the result may be deformity for life—a deformity, perhaps, accompanied with life-long suffering.

It requires less professional skill, as a general thing, in the treatment of simple fractures, than of time, watchfulness and patient labor. The principles governing these cases being usually simple, the surgeon has but little to do in assisting nature, and that by mechanically removing obstacles, and keeping the limb in a position consistent with its anatomy and physiology. Nature effects the cure here, as elsewhere, while art and science co-operate, at an humble distance.

The necessary knowledge, for the correct and successful treatment of fractures, as in other branches of surgery, is to be obtained by not only elementary, but by the practical study of anatomy; and without it the operator gropes amid doubt, darkness, and danger, to himself and patient.

While simple fractures, if not oblique, are not difficult in their

treatment, the opposite is true in complicated cases, though called simple. When the joint is involved, or the osseous system diseased, or when the fracture is oblique—especially in persons of nervous and irritable habits—there is great difficulty attending the treatment, and the result will always be doubtful, and often unfortunate, after the application of the greatest care and skill. Serious as are these complicated cases of simple fractures, they are, after all, less formidable than what are called *compound fractures*. To these may be added all the complications that render simple fractures so troublesome.

No surgeon who understands the difficulties of his profession, will fail to feel uneasy, if not alarmed and aroused, by the magnitude of these injuries, when called to assume the responsibility of conducting them to an issue, both on his own account and that of his patient.

From the low organization of the osseous tissue, the sensibility and equilibrium of the constitution is but little disturbed, ordinarily, in simple fractures. The health not being materially affected, there is but little inflammation, and no suppuration to interfere with the simple union of the fractured parts. The only evil to be encountered arises from the necessary restraint to which the patient is subjected, incidental to the exact adhesion of the ends of the fractured bones. Perfect as are the powers of nature, they are insufficient in these cases, unless directed and relieved by intelligent and persevering art. The surgeon, therefore, who, with this duty devolving upon him, and surrounded with all the advantages that favor his treatment of fractures, is without excuse if he permits deformity to supervene and remain, for want of due care and attention, when nice questions, on controverted points, do not enter into the case, or peculiar difficulties attend it.

Much reproach has been cast upon British surgery, whether justly or not we can not tell, because of the frequent occurrence of deformity in the simple list of fractures—not only in private, but in hospital practice. If this complaint is well grounded, it is not to be accounted for in the want of surgical knowledge, in the

main—for England has produced, and still furnishes, some of the ablest surgeons in the world—but in the fact that they neglect to attend to the smaller and apparently more unimportant matters of surgery. It is not in the management of great cases that superior surgery is displayed, but in the common occurrences which daily arise, as in simple fractures, do true knowledge and skill become illustrated. Although but little may be called for, still that little may be as important, in its bearing on the result, as if the demand was greater. "Genius for our art may shine out on great occasions," says one of England's ablest surgeons, "and brilliant devices contend against remarkable deviations from health, but *conduct* is required of us all. The word *conduct* has a wide interpretation; it appeals to the application of the humanities of life, as well as the exercise of skill and industry in the application of our best resources to the treatment of disease."

In holding the surgeon to a proper accountability in his treatment of uncomplicated fractures, it must not be forgotten that, not unfrequently, there arise cases of great difficulty and doubt, where the surgeon is embarrassed with both palpable and obscure agencies, that render his most persevering and best-directed efforts of but little or no effect, and the termination, without fault on his part, often unfortunate. In these cases, more particularly, he is often unjustly and ruinously assailed and censured, for want of success, both in and out of court. Attorneys should be aware of the existence of these cases, and carefully discriminate between them and those others where there may be delinquency, or actual fault, on the part of the surgeon. In simple, transverse and unembarrassed fractures, the surgeon will be expected to conduct the case to a successful issue. In oblique, complicated, irregular or compound injuries, he can not, in all cases, or, perhaps, in most, overcome these serious difficulties, and effect a complete cure. These are impossibilities he can not surmount; and yet they are the injuries for which intelligent and careful medical practitioners have been made to suffer damages.

The various kinds of fractures just alluded to, of course re-

quire, in their management, different kinds of treatment and degrees of attention. The more difficult forms of fractures, and those from which the surgeon has most to fear, and which the courts are most frequently called upon to review, are those called in the books *compound* and *oblique* simple fractures. The term compound fracture, is strictly technical, and to the unprofessional conveys an incorrect idea. It is a fracture of the bone, *accompanied with a wound of the skin*, communicating with the fractured bone. There must, therefore, it is supposed, be a greater extent of injury, as a general thing, to the soft parts of the limb; consequently much greater difficulty attends the healing process of the case. This term—compound fracture—as used in surgery, must, necessarily, afford many exceptions to this rule, because a cutaneous bone like the tibia or ulna may, when fractured, be forced through the skin with but little injury to the soft tissues of the limb, and still, while the technical definition brings it under the head of "compound fractures," it may be, in fact, really one of the most simple; while, on the other hand, the most severe, troublesome and dangerous injuries may be, technically, simple, because the skin is not broken. Thus, the fracture may be a *comminuted* one, involving great injury of the muscles, nerves and blood-vessels; and yet, the cuticle being unbroken, it must be technically called a simple fracture. This gives rise to much confusion in the minds of those who have not given the subject particular attention. An attorney, for instance, after ascertaining or inquiring into the nature of a case, learns that at the commencement it was a *simple* fracture, and, judging from the magnitude of the evil resulting to the patient, concludes that there must have been Malpractice in the treatment, and commences at once a a suit for damages.

Those unacquainted with surgery and anatomy have a right to understand from the term simple, a slight, plain and unimportant injury, which, under ordinary circumstances, will run on to a favorable termination. For the same reason, a compound fracture is looked upon as necessarily more complex and difficult in treat-

ment, when, in fact, it may not be particularly dangerous or troublesome in its management.

The severer forms of simple and compound fractures, in general, demand of the surgeon the highest degree of effort and intelligence, and the surest resources of his art—whether considered in regard to local, mechanical or constitutional management. The dangers from simple fractures are usually immediate and simple. In compound fractures, on the other hand, the danger is generally prospective. The immediate local inflammation may be severe, but the great danger to be anticipated is from suppuration and gangrene; and these symptoms are not unfrequently accompanied by different forms of traumatic fever, assuming the character of hectic and typhus. The constitutional forces being reduced by the original shock to a low standard, the powers of life run low, leaving the integrity and vitality of the recuperative agencies powerless; and, just at this point, and under this state of things, one of the most difficult and close questions of surgery arises—a question upon the solution of which depends the life of the patient, perhaps, and, possibly, the reputation of the surgeon—to decide which question correctly, calls into requisition correct logic, close observation and extensive surgical knowledge: and that is the question of *amputation*. In these difficult cases, the result, let it be for or against amputation, will generally be critically questioned. The loss of a limb, on the one hand, will raise the question of the propriety of the amputation, long after the real condition that was supposed to demand it is forgotten by all, perhaps, except the surgeon himself. So, if amputation is overruled, and the patient dies, the surgeon is to blame for the sad result. These cases are most fruitful sources of litigation. If the limb was amputated, it is said there was gross carelessness, or recklessness, and a want of care and skill—that the limb might have been saved had the proper effort been made at the right time. If the surgeon gives to the patient the benefit of a doubt, as to the propriety of amputation in a close case, and, after long and vigilant watching, surmounts great difficulties, saves the limb

in a condition to be of great use to the patient, yet, it not being a perfect cure, then the surgeon is said still to be at fault, notwithstanding the injury was so severe that the question of amputation hung evenly in the balance for a time, and he is sued.

Such cases, with similar results, have fallen under the observation of every surgeon, and most attorneys. Two cases will illustrate this fact: Drs. H. & S. were called upon to see a Mr. P., whose leg had been crushed by a falling log, while assisting to elevate it in building a log house, in a new settlement. The injury was so severe, in the opinion of these surgeons, that amputation was deemed necessary. They were both old experienced physicians and surgeons, having practiced thirty or forty years in the locality where the accident happened. The operation was performed after due deliberation and consultation—the patient recovering from the operation in about the usual time. Some years after the events of accident and amputation, the manner and propriety of this amputation were discussed among the friends of the patient; the bones were dug up, cleansed, and made the basis of a suit against the surgeons. Damages were laid at $10,000. Eminent counsel were found to undertake and carry on the cause for a portion of the spoils. Several long trials were had—the jury not agreeing. Depositions were taken in Philadelphia, New York and Washington, involving great expense. No judgment was obtained against the defendants, but the litigation was, nevertheless, ruinous to them. The accumulation of the labors of years was swept away. Had these surgeons made the hazardous attempt of saving the limb, and had succeeded to a tolerable degree, then they would have been sued for not having performed a perfect cure.

In the other case, the patient was a rash, reckless young man, and while enjoying one of his break-neck exploits, fell beneath a wild colt, which he was attempting to ride. In the fall the foot and leg lay at an angle of twenty or thirty degrees, resting between the hard earth and a thick oak plank; the weight of the horse crushing it into the ground while in this position. The

result was a compound comminuted fracture of the tibia and fibula, rupturing the tibial artery, crushing the nerves, bruising the muscles badly, affecting the vitality and integrity of the limb to so great an extent, the foot became immediately cold. Notwithstanding these untoward symptoms, the surgeons in attendance adopted the hazardous conclusion of trying to save the limb. The weather was warm and the constitution depraved. General suppuration took place from the knee to the foot. So low were the powers of life, that sloughing supervened at every point about the foot or ancle, where the lightest pressure—even that of a light bandage—bore upon it. Extension was out of the question. The lower part of the heel sloughed, from the weight of the foot, though resting on the softest cushion. Animalculæ would form in twenty-four hours, in various parts of the limb, after the most perfect cleansing.

After months of watching, and the greatest care, adhesions took place, and the patient recovered from one of the severest and most loathsome fractures of the leg, with a healing ulcer over the instep, and the limb, perhaps, half an inch shorter than its mate. The surgeon received from the township authorities—for the patient was a pauper—twenty dollars for his services. So soon as the patient could travel, he found his way to a lawyer, and commenced a suit against the surgeon, not because he had not cut the limb off—which he should have done according to the best rules of surgery—but because there was an ulcer still remaining, and for the other reason that the limb was at least half an inch too short! Damages $5,000. The case, after hanging in court for several terms, to the great annoyance and damage of the surgeon, was dropped.

So alarmed and disgusted was the surgeon at the facilities for bringing a suit for Malpractice, and the danger of having to defend cases of this kind, he left the profession forever.

The author knows many able surgeons, who, being men of property, will not risk it by the practice of surgery. They practice medicine, but not surgery, and for the reason of the dangers attending its practice.

There can hardly be found a place in the country, where the oldest physicians in it have not, at some period of their lives, been actually sued, or annoyingly threatened. The fact that actual damages are not often recovered, helps the matter but little. The damage to business, and the costs attending the suit, are usually great.

Very great difficulty attends the treatment of oblique simple fractures, and there is no doubt but too often—at the suggestion of the patient himself, perhaps—the surgeon leaves the case too soon. In the able report to the Ohio State Medical Society, on Malpractice, already referred to, it is said:

"Your committee consider it unsafe to leave any of the larger oblique fractures at the end of thirty-four days; and here we would respectfully suggest that our text-books and teachers would do well to observe a distinction as to the length of time treatment should be continued in those cases of transverse fracture, where there is overlapping, and the larger oblique, as compared with transverse fracture, where there is no overlapping.

It is believed that all our works concur in this opinion, that the new bond of union is such, that pressure is capable of curing deformity, of correcting angles, etc.; in brief, that for a length of time, pressure is capable of producing absorption, and, consequently, more or less alteration in the relation of the united bones to each other.

Now, apply what is thus admitted to the circumstances attending a well-reduced and well-retained transverse, as compared with an overlapping or very oblique fracture.

In transverse fractures, if reduction and retention have been quite successful at the end of, say, forty days, we stop our extension and counter-extension; and very soon, if it is a lower extremity, more or less weight is borne by it. Now, reduction and retention having been quite perfect, the fractured surfaces are kept in contact with each other. We will have poured out, in these circumstanses, a minimum quantity of what is usually regarded as provisional plastic material. It will be deposited between the fractured surfaces and around the ends of the bones. Now, dropping our means for extension and counter-extension, at

the end of forty days, we give up the parts to a constantly exerted and unrestrained muscular action, which now comes to exert pressure upon the parts, with a degree of constancy and efficiency far surpassing any thing the surgeon can do by artificial means. The use of the part does the same thing, but with less constancy. But in these circumstances no shortening can result. Pressure upon the articular extremities of the broken bone, is not here an indirect pressure upon the recently-deposited plastic material. It is merely a pressing together of the surfaces of the fracture: this does not produce absorption of these, and therefore can not produce shortening.

But suppose there is overlapping, and the patient is subjected to treatment for the same length of time—admit, too, that an equal strength is attained at the end of forty days—the bond of union, in this case, is effused in the maximum quantity, lies between the bones, around them, and on their ends. Now, what will be the result of pressure from the use of the limb, or from the much more constant and efficient pressure consequent upon muscular contraction?

Pressure upon the extremities of the bone, in these circumstances, is indirect pressure upon the bond of union, and can not fail, if it produce absorption, to change the relation of the overlapping bones to each other, occasioning shortening; hence the necessity of resisting muscular action, and suspending the use of the limb—of continuing treatment, in other words, for a greater length of time than in the first class of cases; hence the necessity of a guarded prognosis, in this class of cases, as to obstinate results; hence, too, the explanation of a shortening process, running through many months, which, your committee are well assured, characterize many cases of fracture; the existence of which shortening process, in a limited number of cases, they have proved by carefully-instituted measurements, made at various stages.

A little reflection is sufficient to show that these considerations apply with scarcely less force to very oblique fractures, with the best possible adjustment."

To Prof. HAMILTON belongs the honor of having, by a long and well considered series of observations, and the collection and comparison of a very large number of cases, established the important fact, of which surgeons themselves did not before seem to be aware, that in almost all oblique fractures there is, necessarily, a shortening of the limb, under the best of treatment. Before his investigations were made known, it was supposed by the unprofessional, and not contradicted by the professional, that good surgery would, in most cases, bring about an exact cure, so far as length was concerned; and when this result did not follow the treatment, the surgeon was blamed. Surgical authors have taught the doctrine, that if the injured limb was not of the same length as its mate, there was bad surgery. Mr. SOUTH, the editor of Chelius' Surgery, says: "In simple fractures of the thigh bone, except with great obliquity, I have rarely found difficulty in retaining the broken ends in place, and in effecting the reunion without deformity, and with very little, and, sometimes, no shortening. For contrary results, the medical attendant is mostly to be blamed, as they are usually consequent on his carelessness or ignorance." So far from this being true, Prof. HAMILTON has shown, in his "Fracture Tables," that in fractures of the tibia and fibula, both compound and simple, perfect results are in the proportion only of one to about three of the cases treated; and in fractures of the femur and clavicle, complete cure results in about one case in five; in fractures of the patella a perfect cure happens only in one case in six.

When attorneys come to understand that the rule is, that under the best circumstances and treatment, the steady contraction of the muscles will bring about a shortening of the limb, there will be much less litigation in this important department of surgery. Dr. HAMILTON could not have done a greater service to the profession than by thus clearly establishing and illustrating the above proposition.

CHAPTER VI.

A DIGEST OF PROFESSOR F. H. HAMILTON'S REPORTS OF CASES OF DEFORMITIES AFTER FRACTURES.

This chapter contains a digest of the Reports of Prof. F. H. Hamilton on Deformities after Fractures, published in Vols. 8, 9, and 10, of "The Transactions of the American Med. Association," embodying those points that arise in cases of Malpractice, and of most interest to attorneys and surgeons in a Medico-legal point of view. The labors of Prof. H. are herculean, and the results, of great practical importance to the surgeon. His Reports run through three volumes, occupying four or five hundred pages of the Transactions.

He says: "I suppose that most practical surgeons have a tolerably correct appreciation of prognosis in fractures. I say tolerably, because I wish to imply a qualification. I do not think that a majority of even 'practical' surgeons have a full appreciation of the subject. I am frank to confess that, until I commenced these investigations, I had not any just notions of the frequency of deformities after fractures. * * * Students will continue to go out from our hospitals with a belief that perfect union of the broken bones is the rule, and that the exceptions imply, generally, unskillful management; and if, when hereafter they have themselves occasion to treat a fractured femur, the result falls short of their standard of perfect success, they, taught also by the same instinct of self-preservation which actuated their teacher, will conceal the truth from others, and even from themselves, if possible. Nay, I fear that sometimes, under the same urgent promptings, and where the moral sense is not superior to all other considerations, they may hesitate to

regard the sanctity of an oath! How else shall we explain the testimony of that man who, with uplifted hand, affirms that he has 'seen and treated ten fractures of the femur, in adult persons, and not one of them is, in any way, shortened or deformed?' Or what less charitable construction will you place upon the published averment of a hospital surgeon, in a neighboring province, when, in his remarks upon my 'fracture tables,' he declares that he has treated, at the hospital under his care, one case of fractured inferior maxilla, three cases of broken clavicles, two of which were at the outer third, seven of fractured femurs, one of which was compound and one comminuted, eight cases of fracture of the tibia and fibula, two of which were comminuted and one compound—in all, nineteen cases, and that, with the exception of one who died, *every case resulted in a perfect cure?*'"

Notwithstanding the very many imperfect cures, in these cases, under the treatment of the best class of surgeons in America, he says: "I am prepared to affirm, after visiting the larger hospitals of England and the Continent, and having observed carefully their methods of treatment, and in some measure noticed their success, that, in so far as I have yet seen, the practice of American surgeons, in the management of fractures, compares favorably with that of any other people. The English are themselves proclaiming their deficiencies in this department of surgery. It is now more than one hundred years since Pott, then surgeon to St. Bartholomew's Hospital, inquired of his brethren if it was not 'notorious' that in England broken thighs and legs were 'often, *very* often, left deformed, crooked and shortened?' To-day, the very distinguished successor of Mr. Pott, in the same great hospital, finds occasion to say: 'One is, therefore, at a loss to find any apology for those surgeons whose want of care, and even humanity, may be attributed *the numerous examples of distorted and contracted members* which have cast a reproach on the surgery of Great Britain.'"

"What good, do you ask, can be accomplished by exposing our failures, unless we have found the remedy, in which, alone,

the world can claim a final interest? I reply, that the first step toward improvement, in any art or science, must be the faithful exposure of its wants and deficiencies;" and he might have added, with equal truth and propriety, "To show to the courts what can not be accomplished by the best-informed and most practical surgeons in the profession, thus saving them from unjust censure and heavy pecuniary damages." The first five chapters, making up the entire Report, in Vol. 8, for 1855, are devoted to fractures of the os nasi, septum narium, ossa maxilla superiora, maxilla inferiora, and the clavicle, out of the treatment of which cases of Malpractice very rarely if ever arise, will be entirely passed over. To the practical surgeon the chapter is of interest, but not so specially to the Medico-legal student.

In the second part of Prof. HAMILTON's Report, he discusses, in a series of chapters, deformities in fractures of the scapula, humerus, radius, ulna, radius and ulna, carpus and phalanges.

The surgeon is not unfrequently sued for damages in cases of fracture of the acromion process.[1] Prof. H. says; "Of the treatment of the coracoid, or of the acromion process, I have only one general observation to make. It is very obvious that, in neither of these fractures can any thing be accomplished by splints, and probably quite as little by position. All that the surgeon can do is to enjoin rest, and, if necessary, to enforce it by suitable bandages, and to control inflammation. If the neck of the scapula is broken, whether the fracture be simple or comminuted, the rational indication seems to be to place a moderate compress on the axilla, and, having disposed the arm in the sling, to secure the elbow snugly against the side of the body."

Deformities after fractures of the humerus are common. The diagnosis is often attended with great trouble—the ablest surgeons being deceived. Prof. H. relates the following case, where he was himself deceived in a fracture of the surgical neck of the humerus; and herein consists the great value of Prof. H.'s

[1] Boston Med. Jour. Vol. 31, p. 501; Illinois Med. Jour. 1845.

reported cases; he never spares himself; where he has failed or been mistaken, he says so without fear or apology.

"White, of Buffalo, aged twelve, fell fourteen feet, striking on the front and outside of the left shoulder. Dr. P., of Erie county, saw the lad within three hours. He was brought to me on the fourth day after the accident. The upper part of the arm was very much swollen. I found the arm dressed as for a fracture of the middle or lower third of the humerus. It was shortened over an inch. The elbow was inclined backward, and there was a remarkable projection in front of the joint, feeling like the head of the bone. The hand and arm were powerless. I suspected a dislocation of the head of the humerus forward; and, having administered chloroform, I attempted its reduction with my heel on the axilla. While making the extension, I felt a sudden sensation, like the slipping of the bone into its socket; but, on examination, I found the projection continued as before. I then repeated the effort with precisely the same result. I now applied an arm-sling, and directed leeches and cold evaporation and lotions. On the 25th, five days after the accident, it was examined by Drs. Mixer, McGregor, Joseph Smith and myself. We still believed it was a dislocation, and, having administered chloroform, we again attempted its reduction. The same *slipping* sensation was produced as before, and the deformity was repeatedly made to disappear; but on suspending the extension, it as often reappeared. The character of the accident was now made apparent, and we proceeded at once to apply the splint and bandages suitable for a fracture of the surgical neck of the humerus, namely, a gutta percha splint, extending on the outside, from the top of the shoulder to below the elbow, with an arm and body roller, secured with flour paste. On the 31st, twelve days after the accident, Dr. Wilcox, marine surgeon, saw the arm with me. The fragments were displaced, the same as when I first saw it, and the same as when no apparatus had been applied. We examined it again carefully, and attempted to make the fragments remain in place, but we were unable to

do so, except while holding them and making extension. August 9th, (21st day,) Dr. Bowen, Prof. of Anatomy, in Geneva Medical College, being present, I removed all the dressings. Motion between the fragments had ceased, but the projection and shortening remained as before; now, also, the irregular projections of the fractured bones were more distinctly felt. The dressings were never reapplied. Three months later no change had occurred. He could carry the elbow forward freely, as well as backward—the motions of the shoulder joint being unimpaired."

There is great difficulty in distinguishing dislocations from fractures of the condyle, where there is much swelling. The following case illustrates this: "Francis Clifford, of St. Catherines, C. W., aged fifteen, fell, in wrestling, with his right arm under him, December 22, 1855. The arm was seen by Dr. Henry Goodman, of St. Catherines, and treated by him. Three months after the accident, the lad was brought to me by his father, and they made the following statement: 'Dr. Goodman said the bones were dislocated inward, and by pulling and manipulation, he reduced them. The elbow was then greatly swollen. He applied no splints, but only treated the arm in such a way as to subdue the inflammation. Subsequently it was seen by another surgeon in Canada, who believed that the ulna was, at the time of the accident, displaced inward, and that it still remained unreduced.' Dr. J. Mack, a distinguished surgeon of St. Catherines, had also seen the arm, and did not think the ulna was now out of place, but that the inner condyle was broken off. I find a fragment—the apophysis of the internal condyle—broken off and removed downward toward the wrist one inch and a quarter, where it is immovably fixed. The elbow is partially anchylosed, so that it can not be straightened completely, nor flexed to a right angle. Pronation and supination are perfect. Dr. Mack had endeavored to overcome the anchylosis by moderate force, applied gradually, by means of a splint, but he had not, thus far, been successful.

The father had already commenced an action against Dr. Goodman for damages.

It is quite certain that the articular surfaces are not now displaced. Whether they were displaced originally, it is, of course, impossible to say. Whether they were or were not, I do not understand how the surgeon is to blame for not recognizing this fracture when the limb was so much swollen; nor do I believe that he could have prevented the displacement of the fragment if he had discovered the fracture. It is very probable, also, that the lad will ultimately have a fair use of his elbow joint; and all this I felt it my duty to state to the parties, to which the father replied only that he could not afford to have his son lose the use of his arm."

Another case is given where deformity resulted from a simple oblique fracture. "A lad of eight years fell from a hight of four feet, striking upon the floor, and breaking his left humerus just above the condyles. The direction of the fracture was obliquely downward and forward. Dr. A. H., of Pomfret, was called, but refused to visit the patient, declaring that he did not practice surgery.

Two other physicians were then successively called, but they also declined positively; and Dr. H., being again earnestly pressed to go, consented, though very reluctantly. He determined easily the nature of the fracture, but as the arm was already much swollen, he concluded not to apply immediately any splints. On the third day he reduced the fragments as well as he could, and applied two right-angled splints—one on the palmar and one on the dorsal surface of the arm and forearm—with suitable compresses, rollers, etc.; also, two small lateral splints. These dressings he continued to the arm during the period of four or five weeks, when they were finally removed. About nine months after the accident the lad was brought to me for examination. I found the fragments overlapped one inch; the upper fragment projecting in front, and the skin covering its sharp point being very thin and tender; the motion at the elbow joint perfect. The hand was flexed forcibly upon the wrist; the first phalanx of all the fingers extended, and the second and third forcibly flexed;

supination and pronation completely lost; the arm weak and painful; the ulnar nerve could be felt lying across the projecting end of the bone. In the hope that some favorable change might result to the hand by relieving the pressure upon the ulnar nerve—yet with not much expectation of success—I exposed the bone, and removed the projecting fragments with a chisel and saw. The ulnar nerve had to be lifted and laid aside. The wound healed kindly, but the hand, one year from this date, remained in the same condition as before the operation."

The surgeon was subsequently sued, but the case never came to trial.

Out of sixty-seven cases of fracture of the humerus, only about thirty-four resulted in perfect cures, though, as a general thing, treated by ordinarily good surgeons—so doubtful is the result in fractures of this bone.

The conclusion to which Prof. H. arrives, where the fracture is on the upper end of the humerus, is, "Where there is much displacement of the tubercle, in consequence of the rupture of the fibrous and tendinous structures which invest it, *ligamentous* union is more likely to be the result than osseous. In the inter-capsular fracture, without impaction, the head of the humerus may perish from want of nutrition. In such cases, disorganization of the joint may ensue, as the result of the processes by which the elimination of the dead bone is accomplished. In the inter-capsular impacted fracture, the deformity is greater than in the extra capsular. Each variety unites with deformity. The chief diagnostic signs of the separation of the superior epiphysis of the humerus, are an abrupt projection beneath the coracoid process, caused by the upper end of the lower fragment, and the immediate recurrence of the deformity when the means employed for its reduction cease to be in operation. There is no fracture incidental to the upper end of the humerus, in which it is more difficult to maintain the fragments in their proper relative position. The supposition that, in this injury, the tubercles form a portion of the lower fragment, involves an anatomical error—the

line of junction of the epiphysis, with the shaft being below these processes." These are also the conclusions of Robert W. Smith, of Dublin.[1] Prof. H. adds: "Perhaps no place will be more appropriate than this, to speak of the difficulty of diagnosis in fractures about the joints, and especially in fractures occurring in the vicinity of the shoulder joint—a difficulty so serious as to materially embarrass the surgeon in his prognosis, and which, it must certainly not be denied, diminishes the value of my own conclusions, as based upon my recorded cases. It is only, after all, by an examination of a great number of cases, both before and after death, that we shall ever arrive at a complete solution of these difficult questions. To this point already the labors of Sir A. Cooper, B. Smith, Key, and others have been especially directed; yet the constant mistakes committed to-day by the most experienced surgeons—not to speak of those acknowledged by Sir Astley himself—testify to the imperfection of our knowledge."

Mr. Johnson says: "It is perfectly undeniable that fractures of the upper extremity of the humerus, and dislocations of the head of that bone—especially dislocations into the axilla—are, at times, confounded with and mistaken for each other, even by those whose experience is great. We allude to our hospital surgeons. If such mistakes, then, occur with those whose opportunities of practice are considerable, *a fortiori*, how much more frequent must they be among those who have few or no such opportunities, and in country practice, in particular. The question, indeed, need not be begged, for the fact, as so put, is, unhappily, notorious."[2]

Prof. H. says: "It has occasionally happened to me to see the surgeon severely blamed for errors of diagnosis in relation to injuries about the shoulder joint; and I would like to impress upon surgeons the necessity of studying the diagnostic signs of these various accidents with great care."

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[1] Treatise on Fractures in the Vicinity of Joints, etc., pp. 207–8.

[2] Med. Chir. Rev., Vol. 14, p. 133.

Of the shaft of the humerus he says: "It has been observed by surgeons that non-union results more frequently after fractures of the shaft of the humerus, than after fractures of the shaft of any other bone. This observation is confirmed by my own researches." This unfortunate result, it is suggested and argued at considerable length, arises from the universal habit of surgeons to dress fractures of the humerus by placing the forearm at right angles with the arm, instead of placing it in a straight position. If this is the cause of the frequent deformities in these cases, it is essential that those who practice surgery should know it. Out of thirty-eight cases of fracture of the radius, reported by Prof. H., twenty-five are imperfect in the result—some slightly. This shows the difficulties attending the treatment of fractures of this bone.

Anchylosis of the wrist and ankle are very common when there has been a fracture of the radius or tibia at its lower end; and this stiffness is often the ground of complaint against surgeons and troublesome litigation.

Prof. H. accounts for this stiffness, not by supposing the bone was not properly set, but he says: "There can be no doubt that this phenomenon is due to an effusion—first serous, and then fibrinous—along the sheaths of the tendons; and it is equally present after sprains and other severe injuries about this part, as in fractures. In many cases, however, its prolonged continuance and its firmness have led to a suspicion that the bones were displaced—a suspicion which only a moderate degree of care in the examination ought easily to dispel. Here, then, we shall find a sufficient explanation of the anchylosis in the wrist and finger joints, which, often for a time almost complete, continues occasionally for many months, or even years, if, indeed, it is not perpetual: an anchylosis, produced, not as has generally been affirmed, by an extension of the inflammation to these joints, but simply by the inflammatory effusions and consequent adhesions along the theca and serous sheaths, through which the tendons all pass in their course to the hands and fingers. The

fingers are quite as often thus anchylosed as the wrist joint itself—a circumstance which is quite inexplicable on the doctrine that the anchylosis is due to an inflammation in the joints. Indeed, I have seen the fingers rigid after many months, when, having observed the case throughout, myself, I was certain that no inflammatory action had reached them. Nor is it any more difficult to show that the anchylosis of the wrist joint is not due to a malposition of its articular surfaces, as has often been asserted in written treatises, and reaffirmed by excellent surgeons, when recording their testimony under oath; for, if the anchylosis of the fingers, in all these cases, is known not to be the result of malposition of their joint surfaces, but only of inflammation of their tendinous sheaths, why shall we refuse to accept the same explanation for anchylosis at the wrist?"

Dr. Mott, of New York, says: "Fractures of the radius, within two inches of the wrist, when treated by the most eminent surgeons, are of very difficult management, so as to avoid all deformity; indeed, more or less deformity may occur under the treatment of the most eminent surgeons, and more or less imperfection in the motion of the wrist or radius is very apt to follow for a longer or shorter time. Even when the fracture is well cured, an anterior prominence at the wrist, or near it, will sometimes result from swelling of the soft parts, etc."

The reporter of the opinion of Prof. Mott, himself a surgeon of New York City, says: "As the above opinion of Prof. Mott coincides with my own observations, both in Europe and in this city, as well as with many of the most distinguished surgical authorities, I venture to hope that it may assist in removing some of the groundless and ill-merited aspersions which are occasionally thrown on the members of our profession by the ignorant or designing." Professor H. adopts the above as his own experience.

The following case illustrates the above principles: "Mrs. Raymond, of Albion, N. Y., aged twenty-nine years, was turned over in a stage coach, and broke the radius just above the wrist joint.

Dr. Huff, a surgeon of well-known skill, residing in Albion, was called, and treated the fracture. About three months after, Mrs. Raymond called upon me to ascertain whether the arm could be improved, and whether I believed the treatment had been correct. The hand falls slightly to the radial side, and the lower end of the ulna is prominent. The motions of the wrist joint are not free. She subsequently commenced an action against the doctor for damages."

Of twenty-two cases of fracture of the ulna, Prof. H. reports ten imperfect.

Of forty fractures of both the radius and ulna, thirty-three were simple, and there were fourteen imperfect cures.

Prof. H. remarks: "The prognosis, in these accidents, seems to take the widest range; for while a larger proportion than in the case of almost any other long bones, united without appreciable deformity, a considerable proportion delay to unite, or do not unite at all; and some, even when the fracture is most simple, result in the complete loss of the limb by gangrene. Of the occurrence of gangrene, and the consequent loss of the entire arm, after a simple fracture, I have reported one example. A second example has occurred in the practice of Dr. Snell, a very respectable young physician, of Brooklyn, N. Y., in which a fracture of the humerus, involving the elbow joint, occurring in a boy of slender stamina, resulted in the loss of that part of the hand by mortification—the little finger perishing from dry gangrene, and the adjacent parts afterward sloughing by ordinary humid mortification. A prosecution ensued, in which Drs. Willard Parker, and Prince declared their conviction that these untoward consequences were due to the bandages having been applied too tightly; while Drs. Mott, Rogers, Wood, Ayers, Dixon and others, believed that the mortification of the fingers resulted from causes over which he had no control. The jury returned a verdict against the Doctor for $3,000. It is understood, however, that a new trial will be granted, as the verdict was clearly against the weight of testimony."

These general principles, connected with the superior extremities, are also applicable to the lower; still, it will be well to follow Prof. H., in his investigations, connected with fractures and deformities of the inferior extremities, that the present state of the science relating to fractures may be well understood by those who have to deal with them legally.

Of one hundred and five cases of fracture of the femur, only about ten are reported as resulting in perfect cures. The treatment is attended with all the difficulty—and possibly more—that attends fractures of the humerus. The small quantity of complete cures, or results, indicate that fractures of the femur are more to be dreaded than those of the humerus—the hip joint more than the shoulder joint.

Shortening is almost universal in these cases of fracture of the femur. While this has been understood, perhaps, by the best class of surgeons, "there seems to have existed only certain vague and indefinite notions as to the proportion and amount of shortening, and which have had for their basis nothing better than a few imperfectly analyzed observations."

The following are the conclusions to which Prof. H. arrives on this point:

"1. That in the case of an oblique fracture of the shaft of the femur occurring in an adult, whose muscles are not paralyzed, but offer the ordinary resistance to extension and counter-extension, and where the ends of the broken bone have once been completely displaced; no means have yet been devised by which an overlapping and consequent shortening of the bone can be prevented.

2. That in a similar fracture occurring in children, or in persons under fifteen years of age, the bone may sometimes be made to unite with so little shortening that it can not be detected by measurement; but whether, in such cases, there is, in fact, no shortening, since with children, especially, it is exceedingly difficult to measure very accurately, I can not say.

3. That in transverse fractures, or oblique and dentriculated,

occurring in adults, and in which the broken fragments have become completely displaced, it will generally be found equally impossible to prevent shortening; because it will be found to be generally impossible to bring the broken ends again into such a position as that they will rest upon and support each other.

4. That in all fractures, whether occurring in adults or in children, where the fragments have never been completely or at all displaced, constituting only a very small proportion of the whole number of these fractures, a union without shortening may always be expected.

5. That where, in consequence of displacement, an overlapping occurs, the shortening in simple fractures, when the best appliances and the utmost skill have been employed, is between one-half and three-quarters of an inch."

Prof. H. insists that the straight position is the proper one for dressing fractures of the femur, and supports his opinion by the testimony of nearly all the leading surgeons in this country and Europe, with whom he has had an extensive private correspondence He also urges a suggestion of the distinguished surgeon of Philadelphia, Dr. Geo. W. Norris, as to the importance of frequent dressings in these difficulties, and frequent dressings in the latter part of the treatment of fractures about the joints, as well as of careful passive motion to the joints, at the same time carefully observing a state of perfect rest.

The following cases, where actions for damages were brought for alleged Malpractice in the treatment of these fractures, are also from Prof. HAMILTON'S report:

John C. Basset *v.* John B. Collins and Anthony Barney. Supreme Court, N. Y.

"In the fall of 1843, John C. Basset, of Independence, aged forty-eight, then in good health, but corpulent, was injured by the upsetting of his wagon, and the falling of a box, as was believed, upon his thigh. He was carried into a public house in Woodhall, and there attended by Drs. Reed and Carey. After a careful and complete examination, by measuring, etc., they concluded

that Mr. Basset had only received a severe bruise. He remained two weeks under their care, and was taken home in a bed. Four weeks after the accident, Drs. Collins and Barney were called in, as the left leg was now said to be shortened and turned out. These gentlemen made an examination, and found the leg in the following condition: Shortened an inch and a-half; the toes turned out, and could not be turned in; the left heel corresponding to the hollow of the right foot; a bunch in the groin, like the head of the femur. They decided that it was a dislocation of the head of the femur upon the pubis, and with pulleys properly adjusted and carefully operated upon, proceeded to attempt its reduction. After two or three minutes' extension and counter-extension, a sound was heard, and a sensation felt by nearly all who were assisting, which was then described as the sound and sensation usually produced when a dislocation is reduced. The patient was now released from the pulleys, and made to get up. The limb was of its original length, and in its natural position, and the tumor in the groin had disappeared. The patient was again laid upon the bed, and dismissed as cured. It, however, appeared in the testimony, that a few days after it was again shortened and turned out; but it does not appear that these facts came to the knowledge of the defendants. It also appeared that the plaintiff did not get the use of his limb so as to be able to dispense with crutches or a cane in one or two years. The limb is now shortened an inch and a-half, and moderately turned over; but the motions of the joint are free, and the plaintiff walks with a very slight halt, and without inconvenience.

Drs. Collins and Barney were sued, and the case was tried January, 1848, before Judge Morain; but the jury having disagreed, it was tried again before Judge Mallett, in the Circuit of the Supreme Court, held in August, 1848.

In the first trial the plaintiff charged that the limb was sound when the defendants took hold of it with the pulleys, and that they then fractured it through the neck and without the capsule.

In the last trial this was not claimed; but it was alleged that

the original accident was probably a fracture without the capsule, and without displacement; that when examined by Drs. Collins and Barney, a displacement had occurred, and that the defendants were chargeable with criminal negligence or ignorance in not discovering that it was a fracture; and consequently for subjecting the plaintiff to the useless pain of extension with the pulleys, and in not applying subsequently a retentive apparatus, since, through this omission, the plaintiff had a shortened and crooked leg.

On the defense, it was admitted that the original accident was a fracture, without displacement; but that it was *within* the capsule, and near the head of the bone; that its being within the capsule, and near the head, could alone satisfactorily account for the 'bunch' in the groin, which disappeared with the reduction, and for the slowness of the subsequent restoration of the limb. It was claimed, also, that the signs described by the witnesses were the ordinary signs of dislocation upon the pubis, and would be likely to deceive the most skillful surgeon; that several eminent surgeons had mistaken fractures of the thigh for dislocations; that the extension with the pulleys did him no permanent harm; that the subsequent treatment pursued by the patient in this case, *viz.:* keeping his bed for a few days, and getting about on crutches, would have been the proper treatment had the exact nature of the accident been fully known; and, finally, that the patient had as good a limb as can ordinarily be expected in this fracture, under the most skillful management.

The examination of the numerous witnesses having closed, and the counsel having addressed the jury, the Judge followed with a most pungent and impressive charge, in which the jury were instructed to disregard all mere appeals to their prejudices, and especially to reject that counsel which would advise them to look upon the medical profession as an oppressive and aristocratic monopoly, and to decide the case upon the facts, as drawn from the witnesses upon the stand. The jury retired, and in a few minutes returned a verdict for the defendants.

The defendants in this case were men who had long practiced medicine and surgery in the county of Alleghany, and they both occupy a high position in the estimation of the public, as men of skill and worth; and it is gratifying to know that, in the mind the Hon. Judge, as well as of the intelligent jury, they received a full and unqualified acquittal from the charge of any degree of negligence or unskillfulness."

Another action resulted from the following case:

"In Dec., 1843, W. S., forty years old, a house-joiner, was employed shingling the roof of a rail-road depot, when he fell and fractured the right femur, about its middle, transversely. Dr. W. of Buffalo, was called, and applied Sir Astley Cooper's double inclined plane, having previously covered the leg with a roller, and secured lateral splints to the thigh. At the end of six weeks the dressings were finally removed, the fragments being united firmly.

Subsequently S. claimed damages for Malpractice in the treatment of the leg, and Dr. W. was sued, and the case was tried in the Erie Co. Supreme Court, first in 1844, and again in June, 1845. In neither of these trials was the jury able to agree. Finally, in June, 1848, it was tried in the same court—Justice James G. Hoyt presiding. The limb was shortened one inch. Drs. Mowbridge, Barnes and Burnell, witnesses on the part of the prosecution, thought it a 'medium cure.' Dr. Sprague did not think so. Dr. Flint, on the part of the defense, thought it an average cure. I thought it nearly, but not quite an average cure. The plaintiff claimed that the bend and shortening was the result of the use of the double inclined plane, and from negligence in its use; and that it occurred while the limb was in the splint. The defendant replying that it came out of the splint straight, and that the deformity now present took place after his responsibility had ceased.

Dr. Trowbridge said that 'more or less deformity usually follows a fracture of the thigh bone, even in the best cases.' Dr. Burnell said 'it was a difficult bone to heal and make straight.'

Dr. Austin Flint said, 'fracture of the thigh bone is one of the most difficult to treat—perhaps, the most so.' Dr. Willard Parker said, 'In children you may generally get union without shortening; in a well, active man you may not—it depends upon the power of the muscles.'

The Judge charged the jury as to the points of law, stating, that if they were satisfied that the defendant had exercised ordinary skill and ordinary care, they were to find for him. He then went into a general review of the testimony, stating, also, that in cases like these the medical testimony should have more weight in matters of opinion than the testimony of other witnesses, as they were, it is supposed, better informed upon matters of the nature here presented.

The verdict was for the defendant."

Here is another interesting case of alleged Malpractice.

"Geo. S. Aikin, of Lockport, N. Y., aged seven years, broke his right thigh obliquely, just above the knee joint, jumping down a bank of about three feet.

Dr. G., an accomplished surgeon, residing in Lockport, was called. The limb was not then much swollen. He applied side splints, rollers, etc., carefully, and then laid the limb over a Day's double inclined plane. The knee was elevated about six or eight inches. Before applying the splints, suitable extension had been made, and after completing the dressings the two limbs seemed to be of the same length. These dressings were examined and readjusted daily. On about the seventh day the lad was complaining a good deal of pain, etc. He had all along been restless, and had complained, at times, of pain in his leg and foot. Dr. E. now noticed, for the first time, that his toes looked unnaturally white, and that they were cold. Counsel was now called, at the request of Dr. G., when it was determined to abandon all dressings, and direct their efforts solely to saving the limb. The result was that slowly a considerable portion of his foot died and sloughed away, leaving only the tarsal bones. The fracture united, but with considerable overlapping and deformity.

Dr. G. sued the father of the child for the amount of his services, when Mr. Akin put in a plea of Malpractice, and that, consequently, the services were without value.

The case was tried at the March Term of the Niagara Circuit for 1856, Judge GREEN presiding.

On the part of the defense, it was claimed that the death of the foot was in consequence of the bandages being too tight. While, on the part of Dr. G., the plaintiff, it was shown that the death of the toes was preceded by the loss of color, and that it was not accompanied with either venous or arterial congestion. The medical gentlemen examined as witnesses, declared that this circumstance furnished the most positive evidence which could be desired, that the death of the toes was not due to the tightness of the bandages; but that its cause must be looked for in an arrest of the arterial or nervous currents supplying the limb, or in both. They believed, also, that the projection of the superior fragments into the popliteal space was sufficient to cause this arrest. They also believed that this overlapping and consequent projection could not have been prevented in this case, and that, therefore, the treatment was not responsible for this unfortunate result; indeed, they regarded the treatment as correct, and the result as a triumph of skill, in that, that any portion of the limb was saved, the leg and foot now remaining, being far more useful than any artificial leg and foot could be.

The Judge, in a charge remarkable for its clearness and liberality, sought to impress upon the jury the value of the medical testimony. The jury returned a verdict for Dr. G., allowing the amount of his claim for services, with the costs of suit."

In twenty fractures of the tibia—fifteen of which were simple—all the results were perfect, except the five that were complicated, and these were all imperfect.

In nineteen cases of fracture of the fibula ten were imperfect.

In one hundred and eight cases of fracture of both the tibia and fibula, thirty-seven are marked perfect, and seventy-one imperfect; forty-nine are not shortened, and sixty-one shortened.

Prof. H. remarks: "The large size and irregular form of the bones of the leg, the small amount of the muscular tissue covering them, especially near the articulations, the severity of the injuries to which they are liable, with their remoteness from the center of circulation—these circumstances render them exceedingly exposed to injury from the too great or unequal pressure of splint or of bandages; and it has often occurred to myself, as it has to Dr. Norris, to find the skin vesicated, or even ulcerated and sloughing, when the patients are first admitted to the hospital; a condition which, in nine cases out of ten, is due to the mal-adjustment of the splints, or to the tightness of the bandages. Too much care can never be exercised in the application of the first dressings, nor ought they ever to be permitted to remain longer than twenty-four hours, without being removed, or freely opened, so as to permit an examination of the limb thoroughly on all sides."

The author has thus made a very careful and full digest of the voluminous Reports of Prof. HAMILTON—running through three volumes of Transactions of the American Med. Association—arranging and condensing that portion that bears directly upon the subject under investigation. The matter here given from those Reports is of the greatest practical value to the medical man and to the attorney; both can at once see what is, and what should be expected of the surgeon in the treatment of fractures, without being burdened with the details of practice. Every surgeon and physician should overhaul and study carefully these Reports. No one can comprehend the amount of labor bestowed upon them—the vast range of authorities consulted and quoted—without thorough examination and study; and this he can not bestow without profit to himself and patients.

CHAPTER VII.

MALPRACTICE IN DISLOCATIONS.

Some dislocations are very simple, requiring but little care, while others are attended with the gravest symptoms. In the latter cases the treatment is difficult and dangerous. The kind and size of the joint makes the difference, together with the complications. From the wrist and ankle upward the difficulty is greater and the danger more to be apprehended; especially the elbow and knee joints, are always attended with great difficulty.

There is no class of injuries to which the human frame is exposed, that will not suffer less from delay than in the case of dislocation. To act promptly and correctly at the time of the injury, is of the greatest importance. Every hour lost enhances, as a general thing, the difficulties of reduction, and greatly endangers the reputation of the surgeon, and it may make him liable, should the delay be owing to his advice or conduct.

Some seem to think that no great degree of anatomical knowledge is requisite or essential to the speedy and correct adjustment of dislocations, from the success that is claimed for the "natural bone-setter," and from the usual quickness of the operation. This confidence in this class of quacks rests upon popular error. It is a remnant of ancient superstition in regard to medicine.

Without a high degree of anatomical knowledge, these kind of injuries can not be treated with any degree of success. In determining the question as to whether a dislocation exists at all—a very important point to be settled—if there exists a dislocation, as to what its nature and complications are; in applying the necessary skill in its reduction, the most thorough knowledge is called

for. It not unfrequently happens that a little hurry or carelessness leaves an important joint dislocated for life, and the surgeon—there being reasonable grounds for believing that ordinary care and skill might have detected the true state of the case, and rectified the difficulty—becomes responsible for the damage.

Sir Astley Cooper mentions a case of dislocation of the os femoris, which was not reduced at the time of the accident, and ever after continued so; a consultation was held upon the nature of the injury, and, after long consideration and deliberation, a report was made by one of the surgeons to this effect, "Well, sir, thank God, we are all agreed there is no dislocation!"

Sometimes the swelling is so great, immediately after the receipt of the injury, or before the surgeon is able to see the case, that it is impossible to decide whether the case is one of dislocation or not.

No correct anatomical knowledge can be obtained of the parts subject to these injuries, without thorough and repeated dissections of the structures of the joints. An acquaintance with the muscles of the limb, and their dissection, however neatly done, does not develop the condition of the joints and their structure, or how a dislocation may take place; its condition when dislocated, upon which depends the direction and degree of extension to be applied in its reduction. Students are too apt to throw away the joint, after having dissected the other parts, thus losing that practical knowledge upon which good treatment of dislocations depends, and giving rise to so many errors and failures in practice, thus laying the grounds for litigation and heavy damages.

The dislocations of the hip, shoulder and elbow, can not be detected certainly, as to their precise nature and extent, except by those who possess correct anatomical knowledge.

Sir Astley Cooper says he has known hospital surgeons who have not paid sufficient attention to the study of anatomy, mistake the more difficult kinds of dislocations, and mentions a case that occurred in a hospital, where the difficulty was a *fracture* of the neck of the thigh bone; but, being mistaken for a dislocation, the patient

was exposed, through the surgeon's ignorance, to a violent and protracted extension. This has occurred more frequently than good surgeons would admit, in this country as well as in England.

Without a well-defined idea of the form of the extremities of the bones, their mode of articulation, the ligaments by which they are connected and supported, the direction in which their most powerful muscles act; the man who attempts to adjust a dislocation, or a supposed one, works in the dark. When all these normal conditions are well fixed in the mind, any departure from it is at once detected, and the proper remedy applied. A person not having this anatomical knowledge, should never undertake to reduce dislocations upon the grounds of his medical character or special knowledge in other departments of the profession.

It has already been stated that sudden tumefaction sometimes supervenes, and renders a diagnosis either difficult or impossible; so that a good surgeon may well hesitate until the swelling has abated. In these cases, the cautious surgeon is careful what opinion he gives; and those who are called in consultation, after time has elapsed, and the swelling abated, when the locality of the head of the bone can be easily determined, and the nature and extent of the injury fully understood; can, unwittingly, leave the first-called surgeon, having charge of the case, to unjust and dangerous censures, if they do not explain the reasons why it might have been impossible, at an earlier day, to arrive at a satisfactory conclusion or diagnosis.

An occasional occurrence of difficulty, in reducing what seems to be but a simple dislocation, arises from the obstruction of muscles or tendons, which, becoming rigid or twisted from their position, prevent the return of the head of the dislocated bone into its socket. At other times there are obscure and mysterious causes of difficulty, in reducing dislocations, that evade the closest scrutiny of the most experienced and intelligent, and which will forever remain unknown, unless revealed by *post mortem* examination.

A principle cause of difficulty, in the reduction of a dislocation

of long standing, arises from the increasing inorganic contraction of the muscles engaged; also, the new fibrous adhesions which the new bone acquires; but this difficulty of reduction does not increase by lapse of time as rapidly as does that of diagnosis. The tension of the muscles is not supposed to increase after a few days, while the passive contractions of the muscles will demand an increasing force of extension by the mechanical agents employed; the progress of this additional resistance is slow, and will not, for many days, present any serious obstacles to the elongation of the limb by pulleys or similar agents.[1]

The ablest surgeons differ as to the length of time, after which a surgeon is no longer to be justified in trying to reduce a dislocation by the application of extension. Sir A. Cooper objects to any efforts being made to reduce a dislocation of long standing; and this time he places at two months for the humerus, and three for the femur; while Mr. Skey is not willing to limit the time definite, within nine months or a year, when all effort is to be abandoned. He claims to have reduced a humerus after three months.[2]

In dislocations of long standing the cavity in which the head of the bone played becomes filled with new growth, the cartilages thicken, and the head of the bone becomes fastened in its new position, by fibrous growths, where it rests, in time, almost as firmly as in its original position.

Where there is a mistake in the diagnosis, and extension is applied to a *fractured* limb, instead of a dislocated one, for obvious reasons the result may be serious to the patient and dishonorable to the profession, as well as rendering the operator making the mistake liable.

An ignorant surgeon will sometimes apply the bandages around the elbow joint, to which he applies his extension in such a way

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[1] Skey's Operative Surgery, 73.

[2] Medical Times, London, for June, 1848.

that it slips, and defeats the whole proceeding, or he will bind the elbow to a right angle, in order to get an immovable joint, giving unnecessary pain, and throwing the whole extending force on the forearm. This is an inexcusable error; so, of the lower extremities, the same principles apply. Again, the extending force being applied to the elbow, instead of the wrist, the bone is, in fact, being drawn up by the pectoralis major and latissimus dorsi, while, through the medium of the triceps extensor muscle, is being drawn down, from which, the whole object is to separate and dislodge the head of the humerus. Both the scapula and the pelvis should remain as far as possible dormant, when extension is applied for the reduction of a dislocated femur or humerus.

It is by reason of the neglect of simple points like these, that the profession, as well as the patient, often suffer; and because this is so, and the blameworthy are sometimes overtaken and punished, the idea becomes prevalent that whenever there is a failure to reduce the dislocation, the surgeon is to blame, let the circumstances attending the case be what they may, and that he should respond in damages.

All the medical profession asks, in respect to these cases, is, that the courts shall carefully draw the line between those cases where there is really ignorance, and those where the impossibilities are so great they can not be overcome by skill; and this the courts will do, if the truth can be properly brought before them.

CHAPTER VIII.

ENGLISH AND AMERICAN ADJUDICATED CASES

SEAR *v.* PRENTICE, 8 East's Rep. 347.

The leading English case, where there was no evidence of unskillfulness introduced, though it was alleged in the declaration, is that of Sear *v.* Prentice. This was an action brought by the plaintiff, a shoemaker, against the defendant, whom he had employed as a surgeon, and who, it was claimed, had negligently undertaken the reduction of a dislocated elbow and fractured arm of the plaintiff, of which he had undertaken the cure.

A verdict having been given for the defendant, under the charge of the court, (Justice Heath,) that direction was impeached, and a motion was made to set the verdict aside, and that a new trial be granted, upon the ground that there was evidence laid before the jury of the unskillful treatment of the plaintiff by the defendant; but that they were told by the learned Judge that unless negligence was proved they could not examine into the *want* of skill; and the evidence, he now admitted, did not substantiate the charge of negligence, though it proved the want of skill. Court reviewed the case upon the Judge's report, and it appeared to be this:

The plaintiff's brother-in-law proved that the defendant attended the plaintiff, who had fallen from a horse, and told the defendant that his arm was broken; the defendant thought not; the arm was swollen, and he applied vinegar and bound it with tape. The plaintiff was under the defendant's care ten weeks, without being cured. He could not bend his arm or work at his trade. He then applied to a surgeon by the name of Ringston, who so far remedied the difficulty that the plaintiff could put his

arm to his head. The arm had been dressed and grown almost straight; he could not turn his wrist, and had no motion in the elbow. Ringston broke the callous and set it again, and made a very fine cure, (as the witness himself described it,) which was spoken of about the country. He imputed the failure of the defendant to negligence and carelessness—"an apprentice boy might have known better;" "that the bone might have been set within five hours after the accident," though he admitted the swelling, if much, must first be reduced, which might take a fortnight."

"The learned Judge told the jury that the gist of the action was *negligence*, of which direct evidence might be given; or it might be inferred by the jury, if the defendant had proceeded without any regard to the common rules of the profession; that unskillfulness alone, without negligence, would not maintain the action; and that he was at a loss to say to the jury what degree of skill ought to be expected of a village surgeon. But whether or not his directions were accurate in this respect, at any rate the witness imputed only negligence and carelessness to the defendant and Pidcock, who assisted him, (the defendant,) in not discovering the fracture of the bone of the arm, when they reduced the dislocated elbow, which there was no doubt was properly reduced; and, considering all the circumstances of the case, he did not think there was such gross negligence as to make the defendant liable to the plaintiff in damages. The report says that the jury found for the defendant, much to the Judge's satisfaction.

Here the court was well satisfied that an action lay for unskillfulness, as well as for negligence; but from the evidence it does not appear that unskillful practice was sustained against the defendant, and the court below had charged correctly when it stated negligence and carelessness as one ground of action, and had left it to the jury to determine whether there had been such negligence and carelessness. The jury, by their verdict, said the defendant was clear of the charge, and as no evidence had been introduced or offered, the defendant was clear."

The Judge's charge was erroneous, in that, "that unskillfulness alone, without negligence, would not maintain the action;" yet as no evidence was offered by the plaintiff to this effect, the charge of the Judge could not effect the result; and it is difficult to see how they could take advantage of an erroneous charge that could not possibly affect the verdict of the jury.

Lord ELLENBOROUGH, C. J., said: "The surgeon, who was examined specifically, imputed the failure of the cure to negligence and carelessness, and whatever other expressions he may have used in giving his evidence, upon which the learned Judge has commented, the question of skill did not arise upon the evidence in this case, for no want of skill was imputed to the defendant; and, therefore the opinion of the learned Judge upon that point does not affect the merits of the verdict upon the evidence in the case."

SLATER *v.* BAKER, 2 Wilson, 259.

In an old case, reported in the 2d of Wilson's Reports, and still referred to in almost every modern decision, we have the account of a Mr. Baker, a surgeon of great eminence, who was prosecuted for negligently and carelessly treating a case of fracture, and a verdict was obtained of £500 against him.

This case is one of the oldest on record of the kind, it being tried in 1767.

It appears that Baker had been first surgeon in St. Bartholomew's Hospital for twenty years; that he read lectures on surgery and anatomy, and was celebrated for his knowledge in his profession, and that he was also noted for his humanity.

From the evidence, the case seemed to be this: that Slater, the plaintiff, having broken both bones of his leg, was in the hands of a surgeon nine weeks; that in a month's time after the leg was set, the surgeon found the leg was "healing and in a good way;" the callous was formed; there was a little protruberance, but it was thought not more than usual.

It was proved also by the apothecary who attended Slater the

first nine weeks, that, at the end of that time, he was well enough to go home; that he was present with the plaintiff and defendant; and at first the defendants said the plaintiff had fallen into good hands; and the second time they were all together, the defendants expressed themselves well satisfied with what had been done; but on the third time they came, some alteration was suggested, and the patient, Slater, got into a passion, and was unwilling the defendants should do any thing to his leg. The plaintiff told them he was afraid they would disunite the callous, and, as his leg was straight, it was not necessary. Baker and the apothecary, Stapleton, who was also sued, on their third visit took up the leg, not letting the plaintiff know what they were about to do, and broke up the callous. "Baker took up the plaintiff's foot in both his hands, and nodded to Stapleton; and then Stapleton took the plaintiff's leg upon his knee, and the leg gave a crack, when the plaintiff cried out to them and said, "You have broke what nature had formed." Baker then said to the plaintiff, "You must go through the operation of extension." A heavy instrument of steel, "that had teeth," was put upon the leg to produce the extension.

At the end of four months after this operation, the patient was "still very ill and bad of it."

On a motion to set aside the verdict, because, among other reasons, of the great skill and reputation of the defendant, Baker, as a surgeon, the Lord Chief-Justice said: "When we consider the good character of Baker, we can not conceive why he acted in the manner he did; but many men, very skillful in their profession, have frequently acted out of the common way, for the purpose of trying experiments. Several of the witnesses proved that the callous was formed, and that it was proper to remove the plaintiff home; that he was free from pain and able to walk with crutches; we can not conceive what the nature of the instrument made use of is—why the defendant, Baker, put it on, when he said that the plaintiff had fallen into good hands, and when the plaintiff only sent for him to take off the bandage;

it seems as if Mr. Baker wanted to try an experiment with his new instrument. That the plaintiff ought to receive a satisfaction for the injury, seems to be admitted; but it is said the defendant ought to have been charged as trespasser *vi et armis*. The court will not look with eagle eyes to see whether the evidence applies exactly or not to the case; when they can see the plaintiff has obtained a verdict for such damages as he deserves, they will establish such verdict, if it be possible. For any thing that appears to the court, this was the first experiment with this new instrument; and if it was, it was a rash action—and he who acts rashly, acts ignorantly—and although the defendants, in general, may be as skillful in their respective professions as any two gentlemen in England, yet the court can not help saying that, in this particular case, they have acted *ignorantly and unskillfully*, contrary to the known rule and usage of surgeons."

The Chief-Justice, in this charge, says *rashness* is *ignorance*, and because the party wished to try an experiment that he was not warranted in doing, that he acted *unskillfully*. This is certainly carrying judicial license and construction beyond reason, or the correct import of language. Baker may have been guilty of *rashness* and recklessness, and probably was, if the evidence is to be relied upon; and, if so, should respond to the plaintiff in damages; and the greater his skill and knowledge, the greater the blame that attached to the act. But it can not be said, with any propriety, that because of his great skill and high standing, in this particular case, wishing to try an experiment, that he acted ignorantly and unskillfully.

The line is a very close one, between a case of this kind, where the defendant is guilty of a rashness and recklessness, that points strongly to a criminal intent or reckless disregard of life and limb, and those where he is trying to cure but by reason of foolhardiness and culpable rashness, he is actually guilty of a crime. To correctly determine where the criminal offense ends and the civil begins, is often a point of great difficulty. This difficulty arises from the fact that a physician may intend well,

and yet his conduct be so exceptional that he must be held liable criminally when life is lost by such conduct, though he did not intend it at the time.

AMERICAN ADJUDICATED CASES

GALLAHER AND WIFE *v.* THOMPSON; Wright's Ohio Supreme Court Reports, 466.

Case against the defendant as surgeon and physician.

The declaration contained three counts. 1. On the defendant's undertaking skillfully to set Mrs. Gallaher's leg, which had been broken; breach, that he so unskillfully set the leg that it is of no use. 2. On his promise to attend Mrs. Gallaher, and skilfully set and cure the broken leg; breach, that the work was done so carelessly that the leg is ruined. 3. On a contract to attend, take care of, and cure the leg in a skillful manner; breach, that he so carelessly performed, that the leg is useless. Plea, not guilty.

Evidence was introduced to prove that the defendant was a surgeon; that he was called by Gallaher to his wife in the usual way, and attended and reduced the limb; but in the cure the ankle joint became anchylosed, and the foot turned in, so that in walking the weight of the body fell on the outer side of the foot, near the root of the little toe. Much evidence was also given of the kind of treatment bestowed upon the limb—some condemning and some approving—when the plaintiff rested.

W. B. Hubbard, for the defendant, moved for a non-suit—1st. Because there is no proof of any engagement by the husband and wife, as in the first count. 2d. Because there is no proof of any contract to cure, and the law does not imply such promise from the retainer.[1]

S. W. Culbertson, contra.

WRIGHT, J.—The second and third counts of the declaration are upon an express undertaking to cure. There is no evidence of such an undertaking, and the law does not imply one to that extent, from the mere employment of a surgeon to attend a

[1] Esp. Ev. 257; 2 Com. on Cont. 337.

patient. When the act to be done depends on the skill of the operator alone, the law will imply an engagement to use that skill, and to produce the desired result, from the employment of one professing it, and holding himself out to the world as having it. Where the result desired, as the cure in the case before us, depends both upon skill in the use of means, and the influence of other causes, the law raises no such implied engagement; it regards the undertaking to be only for the use of proper means. The retainer of a lawyer obliges him to the right conduct of the suit; but not for the judgment of the court, for that is beyond his control. The retainer of a physician obliges him to the employment of ordinary medical skill in the treatment of the patient; the cure is not with him, but is dependent upon the constitution of the patient, and the influence of causes beyond the control of the physician. The husbandman employed to cultivate a field is not supposed to engage for the production of an average crop. He may plough and sow, plant and water, but the increase is not from him. A smith engaging to shoe a horse, impliedly engages skill to put the shoe in the proper place, and to avoid the quick in his fastening; because that is a mere physical operation—the end sought for depends upon nothing but skill. The surgeon, called to a patient with a broken or dislocated limb, and operating, impliedly engages the ordinary skill of the profession, in adjusting the fractured bone, or reducing the dislocation, and the subsequent treatment of the patient while he attends; these depend on himself. He is not supposed to engage to cure, or to insure a recovery, because a cure depends not upon him. This point has been several times before the court, and has been always so decided. As to the second and third counts, therefore, there is, at present, a want of evidence to sustain them.

The first count is an undertaking with both the plaintiffs. The proof is of an engagement by the husband. This, it is urged, is proof of a contract different from the one declared on. Where the injury is to the absolute rights of the person, as, batteries, injuries to health, reputation, liberty, and are inflicted upon a mar-

ried woman, and the suit seeks compensation for the injury to her, or for her personal suffering, the husband and wife must be joined in the suit; for, in case of his death, the cause of action survives to her, and she may prosecute the suit to judgment and execution.[1] The difficulty suggested is not perceived; but it is one open on the record, and may be raised hereafter, if further examination is desired.

It is further objected, that the retainer of the surgeon does not, in law, suppose an undertaking to reduce or set the bone skillfully; but that such undertaking must be expressly proved. The setting or putting in place the bones, is a mere physical operation; and we think the retainer and the visits and acts of the surgeon do lay a foundation, in law, to suppose an undertaking to reduce the leg, and to treat the patient skillfully.

There is evidence, on the subject of the treatment, which is for the jury. The question, whether the skillful setting and judicious treatment should, at all events, effect a perfect cure, is a distinct one, not necessary now to decide. The motion is overruled.

Evidence was then offered on both sides as to the manner of treating and dressing the limb, and of surgeons, as to what was the usual and customary mode in the profession, etc., when the evidence was closed.

Culbertson, for the plaintiff, admitted he could only recover on the first count, for the unskillful setting of the bone, and submitted, without argument, to the jury.

Wright, J.—The question turns solely on the credit due to the physicians who have testified as to the practice. If they are skillful themselves, and worthy of credit, your verdict should be for the defendant, for they all sustain the practice; if unworthy of credit or unskillful—and the other proof shows the practice careless and unskillful—you should give the plaintiff such damages as will compensate for the injury the wife has received.

Verdict and judgment for the defendant.

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[1] 1 Ch. Pl. 46, 61; 2 Kent Com. 151.

CHAPTER IX.

AMERICAN ADJUDICATED CASES CONTINUED

McCANDLESS *v.* McWHA, 22 Pennsylvania Reports, 261.

Error to the Common Pleas of Beaver County.

This was an action on the case by James McWha *v.* Dr. Alexander G. McCandless, for an injury sustained by reason of alleged Malpractice, in the setting and treatment of his broken limb. The action was brought to September Term, 1848.

The plaintiff, by accident, had his left leg broken, about the 24th March, 1847, and the defendant, a surgeon and physician of good standing in his profession, and otherwise, was called to set the leg and attend to it.

After the leg had healed, this suit was brought to recover damages for Malpractice, on the alleged ground of a want of the exercise of sufficient surgical skill and attention to the broken limb, whereby, it was alleged, the leg had become shorter than the other.

On the part of the plaintiff in error, the defendant in the action, the only testimony stated on the paper book, was a deposition of one Dr. Duncan, who, *inter alia*, testified that he had been in practice over two years; that in the capacity of a student under the defendant, he went with the defendant to visit the plaintiff about a week after the fracture had occurred. The character of the fracture was that of *an oblique comminuted fracture of the tibia and fibula* of the leg, which was fractured nearly half way from the ankle to the knee. The bandages were opened, so that he discovered that there were splints on the fore and back

parts of the leg, reaching from the ankle to the knee, to keep up extension and counter-extension. He subsequently stated that, at the time he referred to, the leg was considerably swollen. He said he did not *feel* the limb; but so far as he could determine by the eye, the limb appeared to be correctly set. He further testified that, on this occasion, he heard a conversation between the defendant and the patient in reference to the limb, and heard the defendant give instructions to the plaintiff as to the dressing and position in which the leg was to be kept. The conversation was, in substance, a complaint by the defendant against the plaintiff, for having disturbed the bandages and dressing, by loosing them—the plaintiff defending the act *because his leg was painful.* The defendant instructed the plaintiff not to disturb the bandages, to keep them moist, and keep the leg in the position he left it, *viz.:* horizontally—telling him if he loosed the bandage the leg might be shortened.

He further stated that the plaintiff's habits were intemperate at times before the accident. He expressed the opinion that, from the disposition and habits of the plaintiff, no physician could make him obey instructions as to the care of his leg; nor, considering his disposition and habits, treat his case in the ordinary manner. He said that he saw the leg about six months afterwards; the bones of it were displaced; but whether that was the result of unskillful treatment or improper conduct of the patient, he said he could not tell.

On the paper book furnished on the part of the defendant in error, the plaintiff in the action, was a statement of the testimony of several witnesses, which was, however, not brought up with the record.

September 3d, 1850, verdict was rendered for plaintiff for $850.

A motion for a new trial was made; and it was stated on the paper book that, upon consultation, the court declared that if the plaintiff would release all but $500, judgment would be given for that sum. Before release the President Judge, Bredin, died; and, after his death, a release having been filed, releasing the

damages above $500, on 5th June, 1851, judgment was entered on the verdict.

A writ of error was taken. In the Supreme Court a motion was made for the continuance of the case, on the ground that the bill of exceptions to the charge, which, it was alleged had been taken in the case, had not been sealed. The case was continued, and in the opinion delivered in the case by Justice LOWRIE, a mode was suggested for having a bill of exceptions made up and sealed.[1] In pursuance of such suggestions, a petition was presented to the Court of Common Pleas, representing that BREDIN, J., had charged in a certain manner; that exception was taken to the charge, which the President Judge had been requested to seal and to file the charge; but though the exception to the charge had been noted by the Judge, yet the charge was not filed nor the exception sealed.

An affidavit was annexed as to the truth of the facts stated in the petition.

Testimony was heard, after which a bill of exceptions was sealed. It was as follows:

"In this case the plaintiff, by his counsel, alleged that he had received serious damage by defendant not setting his leg properly; or when set, of not using proper splints and bandages to keep it in place, and in using no means to keep up extension and counter-extension, in consequence of which, and through neglect of defendant not visiting plaintiff, and examining the leg to see that it was right, the end of the bones slipped past each other, and, when knit, the broken limb is two inches shorter than the other, or thereabouts."

"After the close of the testimony on the trial of the above case, the Hon. JOHN BREDIN, President Judge, charged the jury substantially as follows: That the defendant was bound to bring to his aid the skill necessary for a surgeon to set the leg so as to make it straight and of equal length with the other, when healed;

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[1] See the opinion, in 8 Harris, 184–5.

and if he did not, he was accountable in damages, just as a stonemason or bricklayer would be in building a wall of poor materials, and the wall fell down; or if they built a chimney, and it would smoke, by reason of a want of skill in its construction, they could not only not recover pay for building, but would be accountable for damages; and if suits were more frequently brought, we would, perhaps, have fewer practitioners of medicine and surgery not possessing the requisite professional skill and knowledge than we now have. But it is due to the defendant to state that, with the exception of the matter complained of in this suit, there is nothing in the evidence given to show that he is not respectable in his profession."

"To which charge defendant's counsel, on the returning of the jury, and before verdict rendered, took exceptions, and requested the said judge to seal a bill thereof, and file his charge of record. The said Judge noted the said exceptions, but omitted to seal the bill of exceptions and file his charge, and afterward died, on the 21st of May, 1851, suddenly, and without having done as requested; and we, the Associate Judges of the said court, (the present President Judge having been counsel for the plaintiff,) on petition of the defendant's counsel to supply the said charge and bill of exceptions thereto, having heard the same, and the answer of plaintiff's counsel thereto, and the evidence adduced in support of said petition and answer, do consider and adjudge that the foregoing bill, in substance, correctly contains the charge, as delivered to the jury in the said action, and do accordingly testify and seal the same this 21st day of September, 1853.

It was assigned for error—1. The court below erred in charging the jury "that the defendant was bound to bring to his aid the skill necessary for a surgeon to set the leg so as to make it straight and of equal length with the other, when healed; and if he did not, he was accountable in damages, just as a stonemason or bricklayer would be in building a wall of poor materials, and the wall fell down; or if they built a chimney, and it would smoke, by reason of a want of skill in its construction, they could

not only not recover pay for building, but would be accountable for damages.

2. In charging the jury that "if suits were more frequently brought, we would, perhaps, have fewer practitioners of medicine and surgery not possessing the requisite skill and knowledge than we now have."

Cunningham and *McCandless*, for plaintiffs in error.—It was said that the rigid and unqualified position stated in the bill of exceptions was not a correct exposition of the law. It was, however, admitted that the law implies a contract upon the part of men, to discharge their duty in a skillful and attentive manner.[1] A physician or surgeon is liable for injuries resulting from the want of ordinary diligence, care and skill.[2] A physician contracts to employ the *usual* skill, but not *to cure*.[3] But the rule stated in the bill, that the physician was bound to bring to his aid, not the ordinary and usual care and skill, but such as "to set the leg so as to make it straight and of equal length with the other, when healed," it was said was in conflict with philosophy and the science of surgery. If such were the rule, all that would be necessary for a patient to do, to entitle him to damages, would be to show that the injured leg was shorter than the other.

It was further contended, that the jury was misled by the court assimilating the case of the surgeon to that of a stone-mason or bricklayer. If a mason or bricklayer should build a wall out of poor materials, which were furnished by his employer, and the wall fell in consequence of the defect of the materials, the architect would not be liable; also, the mason or bricklayer works with inanimate matter; but the surgeon has for his subject a thing of life, active and changing by its nature. The mode of treatment in one case may not be proper in another. Reference was made to *Ferguson's System of Practical Surgery*,

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[1] 1 Saunders, 312, n. 2; 1 Lord Raym. 213; 2 Wils. 359; 8 East. 348.

[2] 9 Conn. 209, Loudon *v.* Humphrey.

[3] Gallaher *v.* Thompson, Wright's [Ohio] Reports, 466.

316, for observations on the mode of treatment in cases of fracture of the leg, and to the observation that "sometimes a fracture may be treated without the aid of any appliances; on other occasions, what may be deemed the most perfect apparatus, will not enable the surgeon to be so successful in his treatment as he could wish;" also, to *Professor Colles' Lectures on Surgery*, 315; *Principles of Surgery, by Professor Miller, of Edinburgh*, 497; *Druitt's Modern Surgery*, 233, same page, "There are some cases which it is as difficult to account for as to remedy;" also, *Gibson's Surgery*, Vol. 2, p. 204; *Abernethy's Lectures on Surgery*, 200; *id.* 209, "It is no use to strap and bandage a fracture, to make it unite by main force." The support to be given to a fracture "should be gentle and equable, such as it would derive from the healthy state of the parts."

It was said, from the surgical principles stated in the works cited, and from the fact testified to, of the fracture being such as stated, that the plaintiff's habits were restless and intemperate, and that he interfered with the treatment prescribed and attempted; that the charge was erroneous, and led the jury to a misapprehension of the true principles which should govern the case.

As to the second assignment, it was said that the part of the charge there referred to was contrary to the policy of the law, as tending to promote litigation. For observations on the subject, reference was made to the Sept. No., 1853, of "*The New York Journal of Medicine.*"

Roberts and *Fetterman*, for defendant in error.—Complaint was made to introducing into the paper book the deposition of Dr. Duncan only.

It was stated, that the fracture being not only oblique but comminuted, or broken into small pieces, according to the testimony, the bone itself could not keep up the proper extension of the leg, and, therefore, something was necessary to keep up the extension of the limb; otherwise the muscles of the leg would, by contraction, cause the oblique or pointed ends of the bone to

slip past each other; while, on the other hand, if the leg was bandaged so tightly as to prevent them passing, painful tumefaction of the limbs would necessarily ensue, and require the removal of the bandages, which result, it was said, was proved in this case. It was, therefore, necessary, as testified by surgeons, to have splints of such length, in this case, as, by fastenings at the knee and foot, would counteract the contraction of the muscles and keep up the extension of the leg at the proper length, and obviate tight bandaging. Besides the want of such treatment, it was said that the patient was permitted to lie on a soft feather bed, without a box or other means to prevent the sinking of the heel or the weighing down of the foot by the pressure of the bed clothes.

It was said, that in making the reference in the charge, to the mason or bricklayer, the Judge spoke only of the duty to bring the requisite skill of a surgeon to his aid, referring to the mechanical trades by way of illustrating the principle; that the reference was understood as illustrating the principle of duty, and not as intended to assimilate the work of a surgeon to the inanimate wall of the mason or bricklayer; that, after the lapse of three years, the recollection of the language must be imperfect, and the court should not strain the language of the bill of exceptions to produce a meaning contrary to common sense and probability.

It was said that it was not stated in the bill of exceptions that the defendant was bound to set the leg so as to make it straight and of equal length with the other, but that he was bound to bring to his aid the skill necessary for a surgeon to set the leg, etc.; and it was this skill to which the court had reference; that the court have before it but an isolated part of the charge. The surgeon is bound to bring to his aid the skill necessary to that end, if it be surgically possible. It was said that, according to the charge, he is only to possess the skill necessary for the purpose; but according to the argument on part of the plaintiff in error, he is also bound to accomplish that result.

As to the portion of the charge referred to in the second assignment, it was said that the remark was not specially applied to this case, and that a judge trying a cause has a right to express his opinion on matters of fact, not as binding instructions, but as enforcing on the jury the performance of their duty.

It was said that medical authorities have been cited to show that extension of the limb is unnecessary in setting a fracture. Whether this is so is not now a question for this court. This court does not sit to correct errors of surgery, but of law. If the judge correctly laid down the evidence before him, he committed no error.

The opinion of a majority of the court was delivered by

Woodward, J.—This was an action on the case by the defendant in error against the plaintiff in error, a respectable physician and surgeon, for Malpractice, in setting a broken leg of the plaintiff; and the only question of any importance presented for our consideration, is whether the court erred in charging "that the defendant was bound to bring to his aid the skill necessary for a surgeon to set the leg, so as to make it straight and of equal length with the other, when healed; and if he did not, he was accountable in damages, just as a stonemason or bricklayer would be in building a wall of poor materials, and the wall fell down, or if they built a chimney, and it should smoke, by reason of a want of skill in its construction."

It is impossible to sustain this proposition. It is not true in the abstract, and, if it were, it was inapplicable to the circumstances of the case under investigation. The implied contract of a physician or surgeon is not to cure—to restore a limb to its natural perfectness—but to treat the case with diligence and skill. The fracture may be so complicated that no skill vouchsafed to man can restore original straightness and length; or the patient may, by wilful disregard of the surgeon's directions, impair the effect of the best-conceived measures. He deals not with insensate matter, like the stonemason or bricklayer, who can choose their materials and adjust them according to mathematical lines;

but he has a suffering human being to treat, a nervous system to tranquilize, and a will to regulate and control. The evidence before us makes this strong distinction between surgery and masonry, and shows how the Judge's inapt illustration was calculated to lead away the jury from the true point of the case. Dr. Duncan describes the fracture as an oblique comminuted one of the tibia and fibula of the leg, about half way between the ankle and the knee; and he says that on one occasion, when he was present at a dressing of the limb, he heard Dr. McCandless complain that McWha had loosened the bandages, and he told him that if he loosed them his leg might be shortened; but McWha justified his act because his leg was painful. Now, upon such a state of facts, the question was not, whether the doctor had brought to the case skill enough to make the leg as straight and long as the other, but whether he had employed such reasonable skill and diligence as are ordinarily exercised in his profession. For less than this he is responsible in damages; but if he be held to the measure laid down by the court below, the implied contract amounts, on his part, to a warranty of cure, for which there is no authority in law. In a fracture like this, a shortening of the limb is sometimes an inevitable consequence. Dr. Dorsey, in his *Elements of Surgery*, speaking of broken legs below the knee, says: "The fracture of both bones is most frequent; it may be transverse or oblique, simple or compound, comminuted or single. The fragments are occasionally displaced in every direction. In transverse fractures there is, generally, no shortening of the leg; but in those that are oblique the leg is generally shortened;" and from *Furguson's System of Practical Surgery*, cited in the argument, we learn that "the fissure in the tibia may be oblique, and the fragments, two or more, may have a constant tendency to become displaced; there may be great irritability of the muscles, particularly during the early part of the treatment—great restlessness of the patient, or unwillingness to submit to the requisite confinement; in short, a vast variety of circumstances likely to cause difficulty in the treatment."

Not to multiply authorities, these are sufficient to show that the rule prescribed by the court is too rigid for this class of cases; that shortening of the leg may result from the most careful and approved practice, or from the misconduct of the patient. Nothing can be more clear than that it is the duty of the patient to co-operate with his professional adviser, and to conform to the necessary prescriptions; but if he will not, or under the pressure of pain can not, his neglect is his own wrong or misfortune, for which he has no right to hold his surgeon responsible. No man may take advantage of his own wrong, or charge his misfortunes to the account of another.

We do not mean to intimate an opinion that this case was perfectly treated, or that the leg could not have been restored to the length of its fellow; but in view of the diversified circumstances that attend cases of this sort, it was very important that the true rule of professional responsibility should have been given to the jury, with instructions that they should inquire, from all the facts in proof, whether the defendant had come up to it or stopped short of it.

We have stated the rule to be reasonable skill and diligence, by which we mean such as thoroughly-educated surgeons ordinarily employ. If more than this is expected, it must be expressly stipulated for; but this much every patient has a right to demand, in virtue of the implied contract which results from intrusting his case to a person holding himself out to the world as qualified to practice this important profession. If a patient applies to a man of different occupation or employment, for his assistance, who either does not exert his skill, or administers improper remedies to the best of his ability, such person is not liable in damages; but if he applies to a SURGEON, and he treats him improperly, he is liable to an action, even though he undertook gratis to attend the patient, because his situation implies skill in surgery.[1] The principle is contained in the pithy saying

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[1] Per Heath, J., in Shiels *v.* Blackburn, 1 Hen. Blac. 161; Seare *v.* Prentice, 8 East. 348.

of Fitzherbert, that "it is the duty of every artificer to exercise his art rightly and truly, as he ought." This is peculiarly the duty of professional practitioners, to whom the highest interests of man are often necessarily intrusted. The law has no allowance for quackery. It demands qualification in the profession practiced—not extraordinary skill, such as belongs only to few men of rare genius and endowments, but that degree which ordinarily characterizes the profession; and in judging of this degree of skill, in a given case, regard is to be had to the advanced state of the profession at the time. Discoveries in the natural sciences, for the last half century, have exerted a sensible influence on all the learned professions, but especially on that of medicine, whose circle of truths has been relatively much enlarged; and, besides, there has been a positive progress in that profession, resulting from the studies, the experiments and the diversified practice of its possessors. The patient is entitled to the benefit of these increased lights. The physician or surgeon who assumes to exercise the healing art, is bound to be up to the improvements of the day. The standard of ordinary skill is on the advance; and he who would not be found wanting, must apply himself, with all diligence, to the most accredited sources of knowledge.

If, in view of the principles here stated, Dr. McCandless shall be found, on re-trial, to have performed his whole duty to his patient, and that any defects in the limb are due to the patient's fault, or to the peculiarities of the fracture, there ought to be no recovery in damages. But if the blemish be fairly attributable to professional negligence, the jury should assess the damages.

The only remaining error assigned is scarcely worthy of notice. The action depended so entirely on its own circumstances that the observation of the court as to the policy of such suits was irrelevant, and, we may fairly presume, harmless. But, for misdirection on the other point, the judgment is reversed, and a *venire de novo* granted.

LEWIS, J., delivered an opinion, as follows:

Without dissenting from the able opinion of Mr. Justice WOODWARD, I make the following additional remarks:

The case is peculiar, and relates to matters of such general interest as to justify this course. The court below charged the jury that "the defendant was bound to bring to his aid the skill necessary for a surgeon to set the leg, so as to make it straight, and of equal length with the other, when healed; and if he did not, he was accountable in damages, just as a stonemason or bricklayer would be in building a wall of poor materials, and the wall fell down; or if they built a chimney, and it would smoke, by reason of a want of skill in its construction." This is the error complained of, and it seems to be thought that the court, in giving this instruction, held the surgeon bound, under all circumstances, to cure the fractured leg, so as to "make it straight and of equal length with the other, when healed." I do not so understand the language of the Judge. He only held the surgeon bound to "bring to his aid" the skill necessary for the purpose. If the fracture in question was one which might have been restored by the exercise of ordinary skill, there was no error in requiring its exercise from one who held himself out as possessing it, and received compensation for his services in consequence of his represented professional ability. This brings us to the question, was the injury one which might have been cured by the exercise of ordinary surgical skill? To decide this question we must have a description of the fracture. The evidence given has not been brought up by the bill of exceptions, and the defendant in error objects to that part of it which has been inserted in the paper book, without being certified as correct. The only testimony presented here for consideration, by the plaintiff in error, is the deposition of Dr. Duncan, who was his student at the time of the injury, and visited the patient in company with his preceptor, after the first visit of the latter. This witness describes the injury to be "an oblique comminuted fracture of the tibia and fibula, nearly half way from the ankle to the knee, or there-

abouts;" and informs us, in speaking of the treatment of it by Dr. McCandless, that "there were splints on the fore and back parts of the leg, reaching from the ankle to the knee, to keep up extension and counter-extension." Dr. McCandless, on this visit, complained that the patient had "disturbed the bandages and dressing by loosing them;" and the patient "defended the act of loosing the bandages, because the leg was painful." The witness further states that the leg, at this time, was "considerably swollen."

We have no precise account of the manner in which the splints were secured, so as to "keep up the extension and counter-extension," for which the witness tells us they were designed. I am unable to comprehend how splints, "reaching only from the knee to the ankle," could be applied to such a purpose without manifest danger of injury, by means of the attachments which would be necessary to produce the result. Extension, as used among surgeons, is the force exerted on the lower fragment, in order to bring its superior extremity lower than the inferior extremity of the superior fractured portion; and counter-extension is a resisting force, which prevents the whole limb, or even the body, from obeying the force of extension. The attachment, by means of a circular bandage at the ankle, for the purpose of extension, and that at the knee, for the purpose of counter-extension, would tend to impede the circulation, particularly the venous return, (which ought not to be obstructed,) and would irritate the parts so as to produce great pain and probable injury. Professor Boyer, in his *Lectures on Diseases of the Bones*, recommends that the splints should be long enough to extend from the knee to a short distance beyond the sole of the foot, and that they should rest perpendicularly on their edges, and a third splint on the anterior portion of the leg. Professor Miller, in his *Principles of Surgery*, states that the splints should "invariably be of sufficient length to command the neighboring joints; otherwise, by rotation, redisplacement will certainly take place." Dr. Hutchinson recommends splints extending from the knee six or eight inches below

the sole of the foot, so as to dispense with irritating attachments at the ankle. But Professor Dorsey, whose skill and experience entitles his opinion to great respect, in his work on surgery, informs us that even Hutchinson's convenient method is found to produce great irritation, and to cause the leg to swell from the pressure of the circular bandages; and that when this happens in oblique fractures of the leg, (such as the case in question,) "the long splint of Desault must be substituted, and the counter-extension made at the pelvis, in the same manner as in the case of a fractured thigh, except that the leg must be dressed with the bandage of strips." In fractures of the thigh, permanent extension is usually effected by means of a long splint, acted on by a band attached to its upper extremity, and passed over the perineum, by the tightening of which the splint and the limb are pushed steadily downward. By the addition of a shorter splint, but long enough, nevertheless, to extend from the perineum to six or eight inches beyond the sole of the foot, united at the lower extremity to the long splint, by means of a cross-piece, the extending force could be applied to the ankle by attachments to the cross-piece, in such manner as to avoid irritation or other injury. But, according to the opinion of eminent surgeons, "a short splint, extending a little above and below the fractures only, is not only an absurdity, but a mischievous absurdity.[1] Entertaining these views of the case, I am bound to say that the plaintiff in error has failed to satisfy me, either upon philosophical principles or by surgical authority, that the means made use of for the purpose of producing "extension and counter-extension," were adequate, or even proper for the purpose. If this was a case in which such extension by artificial means was not required, the mere want of adaptation of means to that end would be immaterial. But we must remember that the fracture was oblique, not transverse; that it was comminuted; that is, the bones were broken, not only at one point, but many, and that both the tibia

[1] Miller's Prin. Surgery, 506.

and fibula were thus fractured. Under these circumstances, in preventing the shortening of the limb by the contraction of the muscles, no reliance could be placed upon the bones thus broken into fragments. The necessity of supplying the place of these natural splints, by artificial means, must, therefore, have been manifest to a surgeon of ordinary skill in his profession. But in addition to the application of means not sufficient to produce the result which was indispensable to a proper restoration of the leg, there is reason to believe, judging solely from the imperfect view of the evidence presented by the plaintiff in error himself, that the short splints were applied by attachments above and below the fracture, so as to impede the circulation, to irritate the parts, to cause the limb to be "considerably swollen," and to produce so much pain that the patient, notwithstanding the strong motive which he had to submit to any treatment likely to effect a perfect recovery, "loosed the bandages because the leg was painful." If this was the case, whatever may be thought of the propriety of the original application of these means of extension, their continuance, and the neglect to adopt others less liable to objection, was *prima facie* evidence of a want of surgical skill, and, if not explained to the satisfaction of the jury, the defendant below ought to answer in damages for the injury.

A patient is bound to submit to such treatment as his surgeon prescribes, provided the treatment be such as a surgeon of ordinary skill would adopt or sanction. But if it be painful, injurious and unskillful, he is not bound to peril his health, and perhaps his life, by submission to it. It follows, that before the surgeon can shift the responsibility from himself to the patient, on the ground that the latter did not submit to the course recommended, it must be shown that the prescriptions were proper, and adapted to the end in view. It is incumbent on the surgeon to satisfy the jury on this point; and, in doing so, he has the right to call to his aid the science and experience of his professional brethren. It will not do to cover his own want of skill by raising a mist out of the refractory disposition of the patient.

The "intemperate habits" of the patient are also relied upon here. But this furnishes no excuse for the want of skill in the surgeon. On the contrary, it was a circumstance calculated to admonish him that the case called for more skill and care than cases of less difficulty demand. We are, therefore, brought back to the main question in the cause.

1. Did the surgeon exercise ordinary skill and care in his treatment of the patient? If he did, he is not liable. If he did not, he is.

2. Was the injury one which, under all the circumstances, might have been perfectly cured by ordinary surgical skill and care? If it was, and the surgeon failed in his duty in this respect, the damages ought, at least, to be commensurate with the injury. If the injured limb was not susceptible of a more perfect restoration, the surgeon would, nevertheless, be liable for any unnecessary pain or delay occasioned by the application of unskillful and improper remedies.

Although the error assigned may not be fully sustained, we have, nevertheless, a right, in our discretion, to reverse for an error not assigned, if it is believed to involve an important principle, or to affect the justice of the case. In the charge the court told the jury, in substance, that the surgeon was bound to bring to his aid the skill necessary to effect a perfect restoration of the leg. The propriety of this instruction depends upon the question whether the injury was one which, under all the circumstances, a surgeon of ordinary skill might have perfectly cured. This was a question of fact, which should have been submitted to the jury. Plain as the question may seem, it is not a matter of law, the decision of which can be taken from them and assumed by the court. There was, therefore, error in giving the peremptory and unqualified direction which withdrew this part of the case from the jury. But there are errors of omission, as well as those of commission. When the Judge spoke of the obligations of the surgeon to bring to his aid the necessary skill, he ought to have enforced the correlative duties of the patient,

to submit to all the skillful and proper requirements of his professional attendant. When the jury were told, in effect, that the defendant was liable if he failed to exercise the skill necessary to a perfect restoration of the leg, they ought also to have been informed that if he exercised ordinary skill and care, he is not responsible for the disastrous result which ensued. Where a case turns upon a question of fact, the jury should be advised of the conclusions of law which apply to each aspect of it. The object of instructions is to enable the jury to form an enlightened judgment on the whole case. The errors of commission and omission referred to, tended to give the jury a one-sided view of the controversy; and, when considered in connection with the facts that a professional man was on trial before a jury of laymen, and that the court, instead of guarding him, as in duty bound, against the prejudice likely to arise in such cases, actually indulged in a strain of remarks calculated to influence them, it is our duty to correct all the errors within our reach. The remarks complained of in the second assignment of error, affirm no principle of law, and are, therefore, not the subject of review here, further than as they suggest the propriety of exercising a prudent discretion in regard to matters which are subject to review.

It is important to the interests of society that the profession intrusted with the preservation of the health and lives of the community, should be held to a strict rule of accountability. Men of true science will not object to this. They court investigation. But the incompetent practitioner and the designing empiric "love darkness rather than light," and the sooner they are driven by judicial scrutiny into other pursuits, for which they are better qualified, and where they can do less mischief, the better for the public welfare. But it is equally important that professional services should be fairly treated, and that true skill and worth should receive the firm protection of the law. All men have a right to the instructions which make in their favor. But the exigency of the surgeon's case rendered them indispen-

sable on the present occasion. The difficulties which seem to stand in his way are sufficient, without aggravating them by withholding the proper instructions in his favor.

For these reasons I am in favor of reversing the judgment and awarding a *venire de novo.*

Black, C. J.—We all concur in the law of this case. The Judge, in his charge, fell into an error in stating the amount of skill required in the treatment of the case. We reverse for that reason. But when we decide the legal point we are done with it. We are not authority on the questions of surgery. Our hands are abundantly full of questions which belong to our own profession, without volunteering opinions on sciences which relate to others. I think it necessary to say this in order to prevent the court below, on second trial, from supposing that we intend to give them any instructions on matters in which we have no jurisdiction.

But this is my own opinion, for which no other member of the court is responsible.

LEIGHTON *v.* SARGENT; 7 Foster's Reports, 460.

Trespass on the case. The declaration contained two counts, as follows:

"In a plea of trespass on the case, for that whereas the defendant was, is, and for many years last past has been, a physician and a surgeon, and during all the time aforesaid had exercised and carried on, and still exercises and carries on, the art, mystery and profession of physician and surgeon, to wit: at Strafford, aforesaid; and while the said defendant so used, exercised and carried on the said art, mystery and profession of physician and surgeon, as aforesaid, to wit: on the first day of September, A. D. 1850, the said plaintiff employed the said defendant, for a reasonable reward to be therefor paid, by the said plaintiff to the said defendant, to treat, set, cure and heal the right ankle and foot of the said Leighton, which he then and there had dislocated, put out of joint, disruptured, broken,

fractured, wounded and bruised; and although the said defendant did then and there pretend and attempt to treat, set, cure and heal the said ankle and foot of the said plaintiff, dislocated, put out of joint, disruptured, broken, fractured, wounded and bruised as aforesaid; yet the said defendant then and there so negligently, carelessly and unskillfully behaved and governed himself, in and about the setting, treatment and care of the plaintiff's said ankle and foot, that, for the want of skill and the proper application of splints, and the application of proper medicaments and remedies thereto, and by and through the mere neglect, default and unskillfulness of the said defendant, in that behalf, as a physician and surgeon, the said ankle and foot of the said plaintiff became greatly inflamed, swollen and festering, and remained so inflamed, swollen and festering for a long space of time, to wit: for the space of eighteen months, and finally became stiff, set, immovable and fixed in an unnatural position, carrying the toes of the said right foot lower than the heel of the same foot, to wit: four inches lower than the heel of the said right foot; and the said ankle and foot remained, and ever since have been, and are now, stiff, set, immovable and fixed in an unnatural position, as aforesaid, whereby the said Leighton suffered, and still suffers, great pain and distress; and so the said ankle and foot were not set, cured and healed, but, on the contrary, in consequence of the unskillfulness, negligence and carelessness of the said defendant in the premises, the plaintiff's said ankle and foot have become set, stiff, immovable and fixed in an unnatural position, incurable and almost wholly useless, whereby the said Leighton has been, and still is, unable to move and walk about without the aid of canes, crutches or other aids, or to labor or do any work, and has suffered, and still suffers, great bodily distress and pain."

The second count is in the same form to the words "and remedies thereto," and adds, "And the default and neglect of the defendant, in not properly extracting and removing the splints and fractured bones therefrom, and by and through the mere

carelessness, negligence and unskillfulness of the said defendant, in that behalf, as a physician and surgeon, the said ankle and foot of the plaintiff then and there became greatly inflamed, virulent, corrupt and festering, and a mass of gathering, putrid sores, and remained so inflamed, virulent, corrupt and festering, and a mass of gathering, putrid sores, for a long space of time, to wit: from thence to the day of the date hereof, and have finally become stiff, weak and almost useless, and the said foot and ankle remained, ever since has been, and is now, inflamed, virulent, corrupt and festering, and a mass of gathering, putrid sores, whereby the said Leighton suffered, and still suffers, great pain and distress; and so the said ankle and foot of the said plaintiff were not cured and healed, but, on the contrary, in consequence of the carelessness, neglect and unskillfulness of the said defendant in the premises, the plaintiff's said ankle and foot have become weak, inflamed, corrupt and festering, and a mass of gathering, putrid sores, and incurable, whereby the said plaintiff has been, and still is, lame, decrepid and unable to walk without canes, crutches, and other aids, and has been, and still is, unable to labor or do any work, and has suffered, and still suffers, great bodily pain and distress."

Upon the trial, upon the general issue, it was proved that, on the first of September, 1850, the plaintiff, in consequence of being thrown from a carriage, sustained a severe injury, in and about the ankle, of such a character that, under skillful treatment, it might be expected to result in the stiffness and loss of the use of the ankle joint; that the defendant was employed as a surgeon to attend upon the plaintiff, and treat the case, and did so attend from the day the injury was received until about the 12th of January following, and attempted the cure of said injury.

On the part of plaintiff, it was contended that the defendant neglected to place and keep the foot in a position at or nearly at right-angles with the leg; but, on the contrary, suffered it to become fixed with the forward part of the foot depressed at an angle of about thirty or forty degrees with the leg, whereby the limb

was rendered useless in walking; and that by proper treatment and the application of proper means, on the part of the defendant, it might have been fixed, if the ankle joint became stiff, in a position at, or nearly at, right-angles with the leg, and thereby have been much more serviceable and useful to the plaintiff; and this was the principal ground upon which the plaintiff claimed to recover damages.

The defendant objected that, under the form of declaration in this case, the action could not be maintained upon that ground, but the court held otherwise, and overruled the objection.

The plaintiff having introduced evidence tending to show unskiliful and improper treatment of the case by the defendant, the defendant then offered to prove that he had received a good medical and surgical education; that he had attended a course of instruction in surgery at a medical school of high reputation, and had otherwise received good, scientific tuition in surgery, and was a regularly-educated and skillful surgeon and physician; to which the plaintiff objected, and the court rejected the evidence.

The defendant introduced evidence tending to show that he used means to bring the foot up, and to keep it in the proper position; and he introduced, among other witnesses, Mrs. Jones, who testified that, on one occasion, when at the plaintiff's house, while he was under the care of the defendant, she saw a book placed behind the foot-board of the box in which the injured limb was placed, in such a manner as to raise the foot-board and the foot resting against it, to a position nearly at right-angles with the leg.

The plaintiff's counsel, in the course of the cross-examination, attempted to throw discredit upon this statement of the witness, and also introduced evidence tending to show that said foot-board was not raised up in the manner stated by the witness, by means of a book, or any other substance placed behind it. The defendant, for the purpose of corroborating the statement of said witness, then proposed to prove, by the husband of the witness, that she stated to him, on her return home from the plaintiff's

house, on the occasion referred to, that she saw the book behind the foot-board, raising it up, as testified by her upon the stand. To this the plaintiff objected, and the court rejected the evidence.

The jury returned a verdict for the plaintiff for $1,500 damages, and the defendant moved that the same be set aside, and a new trial granted, for the causes aforesaid.

For the the defendant it was said—1. The plaintiff alleges, in the first count, that in consequence of the "mere neglect, default and unskillfulness of the defendant, the ankle and foot of the plaintiff became greatly inflamed, swollen and festering for eighteen months, and finally became stiff, set, immovable and fixed in an unnatural position;" and in the next count says nothing of the remote consequences resulting from the surgical treatment, but alleges "that through the mere carelessness, negligence and unskillfulness of the defendant, the ankle and foot of the plaintiff became greatly inflamed, virulent, corrupt and festering, and a mass of gathering, putrid sores, and remained so from thence hitherto." In both counts the direct and immediate injury complained of is the setting, festering, inflammation and sores, and the position of the foot is alleged to be the consequence of this inflammation and these sores, after eighteen months' duration.

The injury complained of the plaintiff failed to prove. On the other hand, every medical witness introduced, both for the plaintiff and defendant, testified distinctly that the swelling, festering, inflammation and sores were a necessary and unavoidable consequence of the severe injury and fracture the plaintiff had received, and would accompany the best possible surgical treatment.

The plaintiff then abandoned this ground of action, and attempted to prove that the foot was not placed and kept in a proper position, while under the defendant's care as surgeon. This he should not have been permitted to do.[1]

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[1] 1 Saund. Pl. and Ev. 344, Tit. Variance; Hulman *v.* Bennett, 5 Esp. 226.

"The cause and manner of committing the injury must be substantially proved as laid."

The case shows that the defendant attended on the plaintiff, as surgeon, four months and twelve days; and the only allegation in the declaration, in regard to the position of the foot and ankle, is, that after eighteen months, in consequence of the swelling, etc., the foot became fixed in an unnatural position.

The allegation is not sustained by the proof; there is a fatal variance, and the plaintiff must be non-suited.[1]

"Where a wrongful act and an injurious consequence are alleged, the consequence must be shown to result immediately from the act: it is not sufficient to connect the act with a remote consequence, by evidence of intermediate causes."

2. The defendant is charged with unskillfulness. The plaintiff introduced witnesses to show that the best medical and surgical books directed and prescribed a certain course of treatment, different from that pursued by the defendant in this case; and then urged that the defendant was unacquainted with the practice of surgery, as laid down in the books of his profession, and, consequently, ignorant and unskillful.

To rebut this and the like evidence, the defendant offered to prove "that he had received scientific tuition in surgery, and was a regularly-educated and skillful surgeon and physician;" and we contend that such evidence would have a material bearing on the question of unskillfulness. If the defendant could show that he had surgical knowledge, or had taken all the steps and employed the best means to acquire it, he would certainly be less obnoxious to the charge of unskillfulness, than if he knew nothing of his profession; and it is one step in the defense to the charge of unskillfulness, to show that the defendant was well qualified to treat such cases. At any rate, it was a good and legitimate answer to the evidence introduced by the plaintiff.

3. The evidence to sustain Mrs. Jones should have been

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[1] 2 Stark Ev. 1584, Art. Variance.

received. The plaintiff attempted to discredit her, by showing that her story was a recent fabrication, and the defendant should be allowed to answer such attempts in the manner proposed.

For the plaintiff—1. The declaration is sufficient to maintain the suit for the defendant's neglect to place and keep the plaintiff's foot in a right position, as well as upon the other grounds stated. It formally, distinctly and fully sets out this ground of damage, and it would be difficult to make it more direct and distinct in the particular to which exception has been taken.

It is of no consequence when the ankle became stiff and fixed in a wrong position, if, as it is alleged in the declaration, that fixedness and stiffness in that wrong position was the result of, or caused by the negligence, carelessness and want of skill in the treatment of the limb, and the jury, under the instruction of the court, must have found that fact, before they could have agreed upon their verdict. But in the case at bar, it appears from the record that the stiffness, etc., happened before the bringing of the suit, and that fact, taken in connection with the distinct allegation in the declaration, that it was occasioned by the defendant's Malpractice, is sufficient.[1]

2. The testimony of the husband of Mrs. Jones, the witness, was properly rejected by the court.[2] There are some slight exceptions to and modifications of this rule, but the case at bar does not come within either.

3. The evidence offered by the defendant, that he had received a good medical education, etc., was inadmissible, and was properly excluded. Mertz *v.* Detweiler[3] is a case directly in point. In this case the defendant called a physician, and proposed to prove by him that he knew the defendant—that he had practiced with him as a surgeon, and knew his skill and character as a surgeon.

The defendant also offered evidence in regard to his knowl-

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[1] Ware *v.* Gay, 11 Pick. 106; 2 N. H. Rep. 160; 2 Pick. 214; 17 Johns. 92.
[2] 1 Stark Ev. 148; Bull. N. P. 294; 1 Phill. Ev. 307, 308; 2 Steph. N. P. 1787.
[3] 8 S. & R. 376.

edge of surgery, anatomy, qualifications, etc. The evidence was rejected by the court, when the learned judge who gave the opinion, said the testimony of the defendant's general skill, etc., was clearly irrelevant; it was not that, but his treatment of the particular case, with which the jury had to do. If the latter was notoriously bad, of what account would be his abstract science, or treatment of other cases. It may be said that his general qualification might seem to shed light on the propriety of his practice in this particular instance; but it is light which would be less likely to lead to a sound conclusion than to lead astray.

The jury, assisted by the opinions of medical witnesses, would be better able to judge of the treatment from the treatment itself, than from the more remote consideration of the defendant's professional reputation, which was, consequently, not the best evidence of which the case was susceptible.[1]

Bell, J., in a long and able opinion, arrived at the following propositions as the opinion of the court:

1. A physician or surgeon, without a special contract for that purpose, is never considered as warranting a cure.

2. His contract, as implied in law, is, that—1, He possesses that reasonable degree of learning, skill and experience which is ordinarily possessed by others of his profession; 2, That he will use reasonable and ordinary care and diligence in the treatment of the case committed to him; 3, That he will use his best judgment in all cases of doubt as to the best course of treatment.

3. He is not responsible for want of success, unless it is proved to result from want of ordinary skill, or from want of ordinary care and attention.

4. He is not presumed to engage for extraordinary skill, or for extraordinary diligence and care.

5. He is not responsible for errors of judgment, or mere mistakes in matters of reasonable doubt and uncertainty.

6. Where the declaration against a surgeon alleged that the

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[1] 1 Saund. Pl. and Ev. 104; 3 Burr, 1918; 9 Bing. 333; 5 B. & A. 840.

plaintiff sustained injury from the *want of skill* and *mere neglect* of the surgeon, in the treatment of a fracture, it was held that evidence that the defendant had received a good surgical and medical education, and was a regularly-educated and skillful surgeon, could not properly be shut out from the jury, because it tended to disprove a material allegation of the declaration.

On the last point the court says: "The declaration alleges that the injury occurred because the defendant so negligently, carelessly and unskillfully behaved himself in and about the treatment, etc., that, for want of skill and the proper application of splints, etc., by and through the mere neglect, default and unskillfulness of the defendant, the plaintiff was injured.

It is, from this statement, uncertain whether it is to be insisted that the defendant was ignorant, and knew nothing of the proper surgical treatment of such an accident as the plaintiff had suffered, or that, being properly educated and competently learned in his profession, he had acted from negligence and carelessness, contrary to what must have been his better knowledge and judgment, if he had given proper attention to the case. Nothing in the declaration confined him to either of these views; and nothing had occurred in the course of the trial to restrict the plaintiff to the point of negligence. He was, therefore, at liberty to take his position before the jury, that the defendant was ignorant and unskillful, or that he was negligent and careless, or, if he was so pleased, that he was both unskillful and negligent. Any evidence, then, calculated to repel the inference of ignorance and unskillfulness, to show that he was a man of suitable education and acquirements for the safe practice of his profession, must surely be competent and proper. Such evidence must change the whole position of the case before the jury, because, if the jury were satisfied he had proper knowledge and skill, the only question must then be whether he had adopted the course of his treatment from mistake, mere error of judgment, or from negligence and want of ordinary care. This, it is obvious, presents a very different state of the question from that where the points of

ignorance, negligence and error are to be considered. As the evidence in question seems to us both pertinent and material, as tending to show ordinary knowledge and skill, we are satisfied it should have been received; and for this cause the case must be sent back for a new trial.

We have examined the declaration, and it seems to us sufficient."

CHAPTER X.

ALLEGED MALPRACTICE IN OPHTHALMIC MEDICINE AND SURGERY.

One of the greatest minds that ever adorned the profession of medicine, spent much time in writing a book to illustrate the wisdom of God, as manifested in the structure of the hand; and though the work was left half done, it is calculated to astonish the mind at the singular structure of that organ, and the power and wisdom of the Maker.

Great and wonderful as is the hand—innumerable as are the wonderful works of the Creator that fill us with amazement and awe, the human eye stands out, when considered in all its wonderful complications and adaptation to give pleasure to the soul, as above them all, and may well be considered as "wonderful" a piece of mechanism as ever came from the hand of God. It is the most perfect optical instrument into which the light ever passed. In it, all the difficulties that have prevented the construction of a perfect telescope are overcome. By the different refractive powers of the transparent medium through which the rays of light pass, and by the curvature given to their respective surfaces, both the spherical and chromatic aberrations are corrected in a degree sufficient for all purposes. The powers by which it adapts itself to variation in the distance of the object, so as to form a distinct image of it, whether it be six inches, six yards or six miles off, are extremely remarkable, and can not be regarded as hitherto completely explained.

The eye is the most complex and complicated of all the organs of the body. The delicacy of the structure is not surpassed by its complicated arrangement, but is equally wonderful. The value of this organ can not be computed. The surgeon, therefore, who

undertakes to treat the eye with medicine, or by operation, must understand his business thoroughly. A higher degree of knowledge is necessary, in treating this most important, complex and delicate part, than may be required to treat the grosser portions of the body. The least error, in treating the eye, might extinguish it forever. It is not safe, therefore, for the patient or the surgeon, to undertake the surgical management of this organ without a specially thorough knowledge of its anatomy—the effect of inflammation in the different structures, it being different upon each—and the effect, to a nicety, of a medicine or an operation. Neither medical science nor law will tolerate guessing in the treatment of this organ. Quackery can not show itself here, without dangerous results.

It is not singular, then, that suits for Malpractice may result from the treatment of this organ.

McMILLEN *v.* HEWITT, SPRAGUE AND RODMAN; District Court, Cuyahoga Co.

This important case was tried before Judge BRINKERHOFF, of the Supreme Court of Ohio, at the October Term of the District Court of Cuyahoga County, A. D. 1857, having passed through several lower courts.

Ingersoll, Kelly and Griswold, for plaintiffs.

John McMillen, jr., charges Hewitt, Sprague and Rodman, defendants, in his petition, that he employed them, they being physicians and oculists, to attend and treat his eyes, the defendants holding themselves out to the public as especially learned and skillful as oculists; but, instead of using due and proper care, skill and diligence in and about the treatment of the plaintiff, they then and there conducted themselves in an ignorant, unskillful and negligent manner in that behalf, in this, to-wit: that on the 3d day of August, 1853, and during divers other days, then next following, and before the commencement of this suit, the said defendants bled and cupped the plaintiff in a profuse manner, taking blood to a great, immoderate and unnecessary extent, which the defendants would not have done had they

used due and proper care, diligence and skill. The petition further charges that on the 3d day of August, 1853, and at divers other times, the defendants immoderately, unskillfully and negligently, administered to the plaintiff immoderate and improper doses of medicine, to wit: cathartics and other reducing medicines and applications, which they would not have done had they used due and proper care, diligence and skill. By reason of which improper treatment the plaintiff was greatly injured, whereby the plaintiff sustained damages to the amount of five thousand dollars.

Slade and Andrews, for defendants.

The defendants, in answering the petition, admit that they treated the plaintiff for a disease of the eyes, but not under the circumstances stated in the petition. They deny, however, that in the treatment of the plaintiff's eyes they conducted themselves in an ignorant, unskillful and negligent manner, either in blood-letting or in the administration of medicines; but, on the contrary, the general treatment of the plaintiff was proper and correct, under the peculiar symptoms and circumstances of the case. They deny that any unfortunate result, if any, resulted from want of care or skill on their part, but was owing to the peculiar severity of the disease, there being strong tendencies to relapses and unfortunate results; that they brought to the treatment of the plaintiff's case the ordinary skill of physician and oculist, and continued honestly and faithfully to exercise that skill while they treated the case.

The testimony in this case was quite contradictory. Eminent physicians and surgeons differ as to the facts. There is also a slight difference of opinion as to the treatment required in this kind of disease.

The plaintiff and the principal operator in the case, Dr. Sprague, appeared and testified. The plaintiff said his eyes were first affected while tinning the roof of a church, between the 15th of June and the 1st of July—had pain in the back of the head—continued to work till the 2d of July; did not work from the 2d to the 5th;

kept at work till the last of July; used poultices and Thompson's eye water; called on Prof. Delamater the latter part of July; he gave salts and pills, and called second day; called again, and he sent me to be cupped; took from eight to twelve ounces of blood; next day he gave me pills and salts again; had seen Sprague's (defendant's) hand-bill; hand-bill said that Sprague was an oculist recommended by Hewitt and others; father went for Sprague at my request; Sprague came on Wednesday, about three or four o'clock; he said my eyes were in a bad condition; said I had *iritis* in second stage in right eye, and in first stage in left eye; he sent me salve and eye water; I called next morning at nine o'clock; saw Sprague and Rodman; they said I must be bled, and took about a pint of blood; I called next day, and he brushed my eyelids; I called every day, up to Tuesday, August 9th, when he bled me again; next time he cupped me; I kept on a week; he then called on me for a week or ten days; then bled me again; I went to sister's, and he treated me there five or six weeks; the first day gave me two large pills—one to move my bowels, the other not; he gave me iodine, five drops per day, one drop to be added daily; kept on till I took twenty-two or twenty-three drops a day; he then gave me wahoo and other herbs; gave me a box of salve to rub on outside of lids; also, a salve to rub on in the morning, that pained me very much; I dropped it; the noon salve did not pain me much; the evening salve pained me some; at my sister's, gave me another severe eye water to use three times a day; he gave me another to apply after the first, to allay its effect. When Sprague came my bodily health was good; right eye inflamed a good deal; could read with both eyes; right eye, when used, would blur and get watery; he gave me medicine to remove the granulations; it was painful; used a brush to put stuff into eyes, and then brushed it out with water several times; once he touched ball for ulcer; then he could not work it out; lids came down; my gums were affected some four days after Sprague commenced; Sprague said it was canker, and ordered me to gargle it with borax and alum.

The last time he came was on Sunday; I told him I would like counsel; he said he would consult on the general constitution, but not on the eye; I mentioned Delamater, Ackley, Everett; Sprague said he had never given me any mercury; my body was helpless nine weeks after Sprague commenced; could not see any; Sprague bled me four times; two first at office, third time at my father's, and fourth time at my sister's; Sprague admitted I was worse; said I might bear to be bled some ten or fifteen times more—might take a year to cure me; I told him I could not last that long; he put blisters between my shoulders; lump came out, and Sprague said I had scrofula, and that would retard the case; said I had the devil in me; I began to improve two or three days after; got out of bed in two months; in December went out of doors; could distinguish objects in February or March, 1854; near a year before I could distinguish countenances; about two years before I began to read.

Cross-examination.—Went to a quack once or twice, who gave me a bottle of stuff; admitted I was worse after taking it; never said I was getting better; eldest brother had bad eyes; my sister has weak eyes.

John McMillen, sen., father of the plaintiff, testified that John's bodily health was good when Sprague began; saw him only once or twice at his sister's; appeared very low; stopped from work twenty-one to twenty-two months; can not now do more than a half day's work; Dr. Hewitt is a good physician.

Proctor Thayer, Professor of Anatomy in the Cleveland Medical College, testified as follows: Been in practice ten or eleven years; John called two or three times on Prof. Delamater; I made no examination; I don't remember the conversation; on Sunday he came with his father; Dr. Dalamater sent him to be cupped; on the following Monday or Tuesday reported himself much better; I perceived that the eye had cleared up; Dr. D. treated him a long time before I saw him; again, in winter. reduced a good deal; eyes opaque, white and clouded; corneitis and iritis not difficult to distinguish; in corneitis the cornea is

opaque; in iritis altered colors—blue eyes change to yellowish cast; in one hundred bad cases of iritis, ninety will show marks; bleeding is more necessary in iritis than in corneitis, though proper in corneitis, guided by the constitutional symptoms; should bleed and repeat, if necessary, in either case; in iritis bleeding should be practiced early; iritis requires thorough antiphlogistic treatment—blood-letting, mercury and belladonna.

I have never seen any indication of iritis in McMillen's eyes; do not believe he ever had ulcers of the cornea; in either case treatment should not be delayed; would bleed even a scrofulous case if constitutional symptoms demanded it; once bleeding would not materially weaken a man; should apply crystal sulphate of copper to the eye, if there were granulations, by holding up the eyelid, and then working it out; if the eyes were differently diseased, should use different remedies; soothing salve would do no harm in either eye; severe salves should not be applied to eyes affected with acute inflammation; think McMillen had corneitis; would bleed in corneitis and conjunctivitis, if there was fever; apply soothing substances and give mercurials.

Cross-examination.—Some surgeons would take blood, some give antimony and salts, some would give mercury, without blood-letting or antimony; buffy appearance of blood indicates inflammation; eyes in different stages of disease more difficult to treat than where the inflammation is alike in both cases; good applications sometimes painful to the eyes.

Professor John Delamater testified as follows: Have practiced medicine, in all its branches, over fifty years; McMillen came with his father to consult me about an eye; had been troubled several weeks; eye aggravated—not an ordinary inflammation; cornea was cloudy—vision a good deal obscured; could see iris; eye dry; there was a red circle around the base of the cornea, with some vessels across—some uneasiness of the eye. The seat of the trouble was in the cornea; the iris easily becomes involved in such cases; gave him laudanum water and epsom salts; also, Dover's powder and calomel; apprehended trouble

unless arrested immediately; two days after eyes about the same; gave him a smart purgation, and sent him to be cupped, about eight ounces; two or three days he came again; eyes apparently greatly improved; cornea cleared out, and could see the iris; told him to go on with Dover's powder and calomel and wash; heard nothing more of him for several weeks; general health good; firm, strong man; no fever then. Six or eight weeks after this, when I next saw him, he was low and confined to his bed; no appetite; had fever; both eyes affected; eyelids swollen, cornea red and cloudy; eyes perfectly dry; needed tonics and mercury; the disease was aggravated; as soon as his mouth became sore he improved; next tried eye wash; found it did not work well, and went back to soothing treatment; Dr. Sterling advised cutting off vessels; worked well at first, but finally it had to be abandoned; I took him to get Professor Ackley's advice; he advised tonics, quinine and calomel; also, a blister over the eyelid, which at first seemed to aggravate the difficulty; brushed the eye with powder; this inflamed the eyelid. When I first saw him he had corneitis; general treatment in this disease the same as in other inflammations; blood-letting in same class of cases, cathartic, mild diet, soothing applications to the affected part; sometimes it is well to use local irritating means; use of mercury indispensable; tonics sometimes indicated; could not read when he first come to be treated by me; the iris was in a healthy condition when I saw him the last time before my second treatment, and there was no necessity for general blood-letting; blood-letting is less used in corneitis than in iritis; acute iritis often destroys iris in a few days; it might be proper to bleed a man twice, at a short interval, in iritis; mercury is important, and great reliance placed in it to cure iritis; second bleeding sometimes used a few days after first; blood-letting is not to be relied upon to cure; in the low stage, it may be indicated, if something comes in to aggravate disease; if the pulse was firm and strong, would practice general blood-letting at a late stage of case; such a case as this requires in its treatment more than ordinary skill; where

iritis is severe and continues for considerable time, it leaves its mark, when there is no adhesion; tendency in inflammation to extend to the neighboring parts; when we examined the eye at the clinique the iris looked clear; appearance of intersticial ulcers—sometimes may go on to discharge of pus; I used to think such ulcers contained pus, but I was in error; sometimes apply sulphate of copper and nitrate of silver with brush, and sometimes in crystal; to close eyes without washing might be desirable in some cases; the very class of cases that eye doctors get might require such treatment. Burning eyes out worked well in many cases, but badly in others; this was the old practice; should be as likely to apply sulphate of copper in one eye as in the other; scrofulous habit should make us cautious in blood-letting; early iritis more controllable than corneitis; it is difficult to detect iritis; when cornea is obscured it is guess work.

Cross-examination.—Delays over night have been judicious; I have committed many errors in practice that I regret; errors in medicine are common;—iritis might not leave its mark.

Gustav C. E. Weber, Professor of Surgery in the Cleveland Medical College.—Been in practice eleven years; educated in Germany, Paris, Amsterdam and Vienna; there is no difficulty in distinguishing between corneitis and iritis, when they exist alone; when corneitis is present, diagnosis of iritis more difficult; after the diagnosis is determined, there should be no delay in the treatment; there is some variance as to the propriety of blood-letting among surgeons; authors in different countries of Europe differ on this point; the English bleed more than the French or Germans; I would bleed in corneitis: nitrate of silver or sulphate of copper might be applied in conjunctivitis, when it would be improper in iritis; same irritants to both eyes, under different degrees of inflammation, injudicious.

Cross-examination.—Six years in active duties; where the cornea is obscured, other symptoms should guide; pain, deep and lancinating, symptom of corneitis and iritis; iritis attended with most pain; persons looking on bright substances are liable to

inflammations of the different structures of the eyes; the iris might be affected; also, cornea.

Dr. Elisha Sterling.—Iritis and corneitis, combined with conjunctivitis, is as distinguishable as small-pox and gout; in a plethoric person, bleeding and calomel might have been necessary, depend on circumstances; not my practice to bleed at all in diseases of the eye; in first stage of congestion it might be difficult to detect traces of iritis; the second stage would probably leave its mark; can see no trace of iritis in McMillen's eyes; belladonna don't discover it; corneitis not an obstinate disease of the eye; three years in practice.

Dr. J. S. Newberry.—It is not difficult for one who is skilled in his profession to distinguish between iritis and conjunctivitis, combined with corneitis. It would not be proper to go from mild to severe treatment, if the patient was improving under the former; if the patient was getting weaker and weaker, it would be injudicious to repeat blood-letting; severe disease of the iris generally leaves its mark, that distinguishes it from other diseases of the eye; I have examined the eyes of the plaintiff some six months since; there was no evidence of a disease of the iris; there had evidently been corneitis; the cornea was still somewhat opaque; if the patient is of a scrofulous diathesis, we should deplete with caution; granulations upon the eyelids are not manifested at the commencement of the disease; it is the result of inflammation.

Cross-examination.—Have practiced medicine seven years; iritis may exist combined with corneitis and conjunctivitis; in a severe case of iritis, I should first try local depletion; if that did not arrest it, resort would be had to general blood-letting.

Dr. John H. Dix, of Boston, Mass., deposition. — Am an oculist; have been in practice since 1836; treat between eleven and twelve hundred cases annually; in general the diagnosis of iritis is not difficult; in severe cases like the one supposed, iritis would generally leave its mark; there should be no delay in the treatment of a severe case of iritis; corneitis does not generally

require general blood-letting; local blood-letting will, in general, be sufficient in corneitis, but sometimes general blood-letting may be practiced; I have never had a case of corneitis that required three or four blood-lettings in six or seven weeks; in general I should require considerable deviation from the healthy pulse before bleeding, but I can conceive a case where the symptoms, other than the pulse, might require general bleeding; in a scrofulous habit we should bleed less; in syphilitic iritis I would at once resort to mercurials, in some form or other; but in scrofulous iritis I should not probably resort to mercurials till I had tested the efficacy of other treatment; when both eyes are differently diseased, the same stimulants are not usually applicable to both; I never use the sulphate of copper or nitrate of silver in crystal in my practice, though they might be proper under some circumstances, as, where there are granulations; the formation of granulations is a slow process, except in purulent ophthalmia.

Cross-examination.—I could not say, from the hypothetical case, that it would be bad practice to bleed the patient and give calomel and jalap; a buffy coat to the blood would indicate blood-letting; it might be necessary to bleed three times in a bad case of iritis; iritis does not always leave its mark; in a severe case the patient often has to be depleted to a considerable extent before the use of tonics.

For the defense, Dr. Sprague, one of the defendants, testified that when he first visited the plaintiff he was not reading—was in great pain—in a room not favorable for examination; made a partial examination; helped him out of the wagon when he came to the office; there was an ulcer in the upper and outer part of cornea; had suppurated and broken; in the left eye there was a radiated zone—hard and bad granulations—getting worse; had ceased treatment for a week; supposed iris was affected; pupil contracted in left eye; disease commenced in outer coat; gave him blue pill—also, calomel; requested me to come to Jones'; never saw him on bed until the 6th of September.

Cross-examination.—Left eye, contraction of pupil like small

shot; light will contract pupil; when I darkened the eye no alteration took place; in other cases than iritis, rotating zone differs from what it is in iritis; light pink in iritis—darker color in corneitis; found change of colors in iris, and pupil stationary; orange color in the lower part of iris; pupil drawn down a little toward nose, cylindrical in shape; bleeding good in syphilitic iritis; biniodide of mercury good; came to his bed more than two weeks after last bleeding; was brought to his bed by his fever; the last time I bled him was in the sitting room; last bleeding reduced the pain in the head and the redness in the eye; some five days after, symptoms returned; applied salve to acute case; John wanted me to come again, and not leave him.

Re-examined.—I am forty-two years old; practicing fourteen years; studied at Castleton, Vt.; practice mixed; spent one year in studying diseases of the eye, with Dr. Wallace, of N. Y.; about 1st of August McMillen came and said his son had a very severe inflamed eye; went and saw the son; right eye passed into the second stage of disease; an ulcer on cornea; above and around cornea opaque; pupil could not be seen; sclerotic coat very red; conjunctiva swollen; cornea vascular blood-vessels shooting from sclerotic entirely across; beneath net-work of blood-vessels whiteness was seen; pupil obscured; left eye cornea tolerably transparent, though blood-vessels over it; pupil could be seen; vessels formed a zone; conjunctiva very much swollen, passing into same condition as right eye, discharged considerably; granulations on upper lid of both eyes; could not see much; face flushed; pulse full, strong and febrile—80 to 90; fleshy; iris in right eye could not be seen; iris in the left eye most affected or threatened; pain in the head severe; said he had been under treatment for a long time, and was getting worse and worse; wanted me to treat it; came to my office frequently in open wagon; I was at Jones' sometimes every day—sometimes every other day; about September 3d I was sent for, as he was worse; when I saw him I was surprised, and told him so; said you have taken cold; he had fever and headache; full, strong pulse, near

90; eyes very much reddened; his voice indicated catarrh—so his nose; he said he had taken cold, and did not know but it was imprudent doing what he had done; then bled him the third time, and, perhaps, cupped after the bleeding; symptoms mitigated; did not improve much for four or five days; at this time Dr. Delamater took charge of the case, and I was dismissed; John was never in bed until last relapse.

Cross-examined.—In right eye I judged the iris was inflamed, from other symptoms than view of iris; cornea in right eye suppurated.

Re-examined.—Ointment internal, sulphate of zinc and fresh butter; change from active to chronic inflammation gradual.

Dr. Rodman, one of the defendants, agreed with Dr. Sprague, and sustained what he said.

Prof. Ackley testified that he was forty-five years of age; had practiced medicine and surgery over twenty years, and had considerable experience in the treatment of eyes, especially during the last twelve or fourteen years. Upon the symptoms of the disease, and the history of the case, as given by Dr. Sprague, he should say it was a very severe case—a case where, in the majority of cases, vision would be lost under the best possible treatment. I mean the right eye; and it is often the case when one eye is lost from severe disease, the other follows the same course. Antiphlogistic treatment would be proper; but no one but the physician in attendance could determine to what extent it should be carried. I consider mercury as absolutely necessary. I would consider the treatment correct, *viz.*: low diet, blood-letting, calomel and jalap, Dover's powder and a wash. It would be proper to apply sulphate of copper, in crystal or powder, to the granulations after blood-letting. If the inflammatory symptoms continued, I should bleed again, and continue mercurial course; but I wish to be understood as stating that no one but the attending physician can be the judge of the necessity of such treatment. It would be good treatment to cup the temples. There are cases where it would be proper to bleed three times. An ointment of

sulphate of zinc and fresh butter would be proper, in a vast number of cases. A wash of acetate of lead, or sulphate of zinc, or sulphate of copper, would be proper. All such preparations as blue pill, *hydraryrum cum creta, or bicloride* of mercury would be proper. The radiating zone indicated acute iritis, almost always, and particularly so when it is secondary upon diseases of the exterior structures. There are some cases where it occurs, primary and early antiphilogistic treatment cures the difficulty, and no traces are left. It is necessary so to deplete. I apprehend that every case would be subject to a variation of treatment in this respect; but almost every case would require depletion. In these cases the patient is liable to relapse, from causes over which the physician has no control.

I first saw the plaintiff's eyes in February, 1854—examined them carefully, and had a full description of the case and treatment from Dr. Delamater, as far as he was connected with the case. I had no doubt then that the patient had suffered first from severe conjunctivitis, and then sclerotitis and corneitis, and, lastly, iritis. The affliction of the iris I then considered as secondary to the other inflammations. The patient at that time exhibited a constitution that would render such diseases of the eye of difficult treatment. I have treated numerous cases of iritis complicated with conjunctivitis. It is not difficult to detect disease in the external structures of the eye; but it is often difficult to say to what extent, if at all, the interior tissues are involved. As a general rule, when the cornea is so seriously involved as to be opaque, the iris and other internal structures are involved, to a greater or less extent. When the other tissues of the eye have been affected, it is sometimes difficult to detect iritis; but where it is a primary difficulty it is not. I never prescribe for iritis when it is something else, but sometimes prescribe for something else when it is iritis. Contraction of the pupil is often the result of iritis. The reputation of Drs. Wallace and Delafield, of N. Y., is good. I am not personally acquainted with them; but I know their general reputation.

Cross-examination.—There are numerous cases where a well-read physician or oculist may determine whether the treatment has been improper, though he has not seen it. As a matter of course, if the attending physician is to be the proper judge of the course of treatment, he must be a well-read man. I am not intimately acquainted with Dr. Sprague's qualifications as a practitioner, but have heard him spoken of as a well-educated physician and surgeon. I consider Lawrence as good authority on the eye as we have; still he has changed his views within the last ten years. His medical treatment is not equal to McKenzie, while there is no better operator. Such case, of a severity as to require three or four blood-lettings within six or eight weeks, would, in all probability, leave the cornea imperfect. I would not practice general blood-letting as freely in conjunctivitis and corneitis as in iritis; in either case the object would be to hold the disease in check to get time. I do not often repeat general blood-letting in corneitis or conjunctivitis. In many cases general blood-letting is unnecessary.

Henry W. Williams, of Boston, deposition.—I think the treatment of the hypothecated case was proper. The application of crystal sulphate of copper, or nitrate of silver, to granulations, would have been excellent practice. I am not as much in the habit of bleeding as many practitioners. It might be proper in a very robust patient, to bleed three times. I am less inclined to both blood-letting and mercury than most authorities on the eye It would be good practice to use the sulphate. The radiating zone is usually considered to indicate iritis; but it may be caused by disease of the cornea. Iritis generally leaves its mark, if not treated at the outset, but not invariably. The use of tonics before the system has been depleted, would be injurious. There is extreme liability to a relapse in severe diseases of the eye. My age is thirty-three; have been seven years in practice on diseases of the eye. I have been physician to several institutions in Boston for diseases of the eye. I have had a hundred cases of eye disease under treatment at one time. Was educated as

oculist at Paris, London and Vienna, and took my degree at Harvard University.

Cross-examination.—I place McKenzie and Tyrrell above Lawrence in the treatment of the eye. The same medicine may be applied to eyes differently inflamed in such a way as to be proper. Corneitis does not admit of as much blood-letting as iritis, except in the acute stage. I would prefer leeches, but moderate blood-letting would be better than cupping. Local cupping is liable to cause secondary congestion near the eye, in the reparative process necessary for the healing incisions; therefore, no local relief might be obtained, though the general health would be less reduced. I have never employed blood-letting in corneitis more than once; it is seldom accompanied with a vigorous constitution. The diagnosis of corneitis, as distinguished from iritis, is not difficult. It might be good practice to watch the case one day before instituting powerful treatment, in the case supposed. An abscess discharging purulent matter on the cornea would be apt to leave its mark. I was once sued for Malpractice as an oculist, but the suit was withdrawn without any solicitation on my part, before coming to trial.

William Clay Wallace, of the city of New York, deposition.—My age is forty-nine. I have devoted nearly thirty years particularly to the diseases of the eye; twenty of which has been in the city of New York. On the hypothecated case you put, I would have treated the case as indicated. In the case supposed, blood-letting and mercury, to the extent supposed, would have been proper. The bichloride of mercury is an excellent alterative, and is highly recommended in similar cases. Iritis is sometimes very obstinate, and very liable to relapse. Vision is lost from this complaint under the most accomplished practitioners. As a general rule, iritis is not difficult of treatment. In the case represented, several structures were inflamed at the same time; both eyes red and much swollen; eyelids granulated. Both parties may be correct in their definition of the case; it might be called conjunctivitis and corneitis on the

one hand, and iritis on the other. Judging from the symptoms, I believe the patient had a severe attack of Egyptian ophthalmia, and that he was saved from blindness in both eyes by the energetic treatment of the first practitioner. To adopt a tonic stimulating course at the commencement of an acute inflammatory disease, is not only contrary to the doctrines of medicine, but also contrary to common sense and to common experience.

Cross-examination.—If the cornea is clear, it is not difficult to distinguish between iritis and corneitis. A plethoric mechanic, although of a strumous habit, might require active depletion. Belladonna will not cause the pupil to expand when inflamed.

Edward Delafield, of New York City, deposition.—I am sixty years of age, and am a general practitioner of medicine. I have been engaged for thirty-five years in the practice of diseases of the eyes and other practice, in the city of New York. My practice has been very extensive in the treatment of eyes, having seen two thousand cases a year in the Infirmary, besides what have occurred in my private practice. As described in the interrogatory, I would say the case was conjunctivitis—the inflammation of the cornea or corneitis being an effect of the primary disease; and would say the treatment laid down in the interrogatory was proper for either iritis or for conjunctivitis, but not in all its parts necessary in every case of iritis. I would consider it good practice as stated in the interrogatory. In the case supposed I would not bleed a second time; though in some cases it might be proper, in others it would be improper and injurious. Cupping would be very proper under the circumstances. As a general thing I would not bleed a second time; but this is a point upon which experts might differ. Iritis is not a difficult disease to treat; but the case described in the interrogatory is one of much more difficult treatment than iritis. The disease described in the interrogatory is remarkably liable to relapse: very frequently the best medical skill fails to save the sight. My own practice would be to take blood from the arm

once at the commencement; a second might be required; rarely would a third blood-letting be necessary.

Cross-examination.—Unless a physician had devoted more time than physicians generally do, to diseases of the eye, he might readily confound iritis with conjunctivitis; but one who has devoted much time to the diseases of the eye, would have no difficulty in distinguishing between the cases. There is nothing wrong in any part of that treatment, as you state it, as employed early in the disease; but I would probably have employed some other remedies. If the patient became very much reduced, I would not bleed from the arm, but would cup. I would expect more from a decided impression made by the use of mercury in the first instance, than from its continued use afterward. In a strumous habit I would be more cautious about blood-letting. In a majority of cases the treatment indicated in the case would be proper. In *pure* iritis I would depend on mercury. I have often treated conjunctivitis with mercury; but in such cases as the one described, I would rely on a decided impression made with mercury at the outset.

The evidence in this case was voluminous, occupying several days of the court. Only a part has been given; but enough to give an idea of the case and circumstances attending it, and what may be considered medical authority in the case. The case is here fairly presented; although the evidence is not all given, there is nothing omitted that alters the aspect of it.

BRINKERHOFF, J., charged the jury, "That the law did not require of the defendants eminent or extraordinary skill; that this kind of skill is possessed by the few. The extraordinary skill of Delamater or Kirtland are exceptions. It would not do to take them as the standard for the profession of medicine generally. If they were to be taken as the order of professional knowledge required, it would at once drive a large and respectable class of worthy practitioners from the field. Though they do not possess the great learning and ability of those named, it is

perhaps equally true they never will; many, perhaps most, never can attain to such knowledge. An absolute necessity requires that the wants of community must be supplied with the best medical knowledge its means and location will command. To require the highest degree of skill would deprive all places, except large cities, of medical men. The medical profession is as upright, as self-sacrificing and useful as any other—none can do without their assistance during some period of life—and they are eminently entitled to protection at the hands of the court. The surgeon is not a warrantor or a guarantor of a cure. It would be monstrous to require it at his hands; it would be alike monstrous to hold a physician liable for mistakes, if he brings to bear ordinary skill and care. In this case, if the surgeons have not given to the patient the ordinary care and skill of the profession generally, then the plaintiff ought to recover. Should you find that the plaintiff is entitled to damages at all, you are to limit them strictly to the effect of the Malpractice. It would be outrageous to charge the loss of time, the suffering, the loss of eye-sight to the defendants, if it was the natural result of disease, even if they were guilty of some little delinquency, not in itself producing the sad effect. Nothing must be charged to them but what is to be traced directly to their want of ordinary care and skill, and dependent upon it."

After deliberating two days, the jury could not agree, and were discharged.

Another long, tedious trial was had of the case subsequently, upon which essentially the same evidence was given, and the jury found for the defendants.

The expenses attending the case were, of course, heavy.

☞ *See Appendix, page 538, for full Notes on this Chapter.*

CHAPTER XI.

MALPRACTICE IN DRESSING INCISED WOUNDS—DEPOSITIONS OF PROFESSORS HAMILTON AND FLINT, OF BUFFALO.

NICHOLAS M. HOLT *v* ED. BRECK; Cuyahoga, O., Common Pleas, 1858.

In this case the defendant was charged in the usual form with Malpractice in dressing the foot of the plaintiff—it having been cut with an axe on the outside of the foot, just above the little toe. The wound was an incised one, of an inch and a-half or two inches long, just raising a little flap of flesh, passing through the metatarsal bone of the little toe.

Afterward the whole foot became diseased, and amputation deemed necessary. It was claimed that this necessity depended upon bad treatment of the original wound by the axe. Damages laid at $5000.

In preparing the case several depositions were taken. Among them were those of the distinguished surgeon, Frank Hastings Hamilton, of Buffalo, and the distinguished physician, Austin Flint.

Adams and Lawrence, for the plaintiff.

J. J. Elwell, for the defendant.

The depositions were taken at the instance of the defendant.

Prof. Austin Flint, of Buffalo, deposed as follows:

Age forty-five years; special duties as Professor are to teach Pathology and Clinical Medicine in the Medical College and Hospital of Buffalo; have not practiced surgery of late; formerly practiced surgery, but of late prefer the practice of medicine; decline all cases of surgery, and devote my attention especially

to pathology; I have been in the practice of medicine about twenty-four years.

Hypothetical question by defendant's counsel:

We will suppose a case of incised wound from an axe on the outside of the foot, commencing near the lower part of the metatarsal bone, extending up and through the bone, say, three inches, or thereabouts, cutting through the edge of the foot, not injuring the fourth metatarsal bone, presenting a loose flap of skin and flesh on the outside of the foot—the patient a man aged fifty-seven years—would it, in your opinion, be good or bad medical and surgical practice to dress the wound with superficial stitches, above and below, the application of strips of adhesive plaster over the part, and the whole foot surrounded with a roller of cotton cloth sufficiently tight to keep the loose flesh in its place, and carried up around the ankle?

Ans.—I would regard it as good practice.

Ques.—Would it be good or bad treatment, in your opinion, if the attending physician, in the case supposed, should, on the first or second day after the first dressing, remove the circular bandage, if there was swelling and pain in the foot, soak and wash it, and then reapply the bandage, after dressing with simple cerate?

Ans.—I should regard it as good practice.

Ques.—State whether or not the treatment indicated in the case supposed, would tend, in any way, to develop disease of the bones of the foot?

Ans.—I think not.

Ques.—In your opinion, as a pathologist, would it be possible or impossible to bandage the foot, in the hypothetical case, so tight as to develop disease of the bones of the foot, or disease of the periosteum, within twelve days, without seriously affecting the soft parts?

Ans.—It would not be possible.

Ques.—State what the effect of too tight bandaging would be upon the flap supposed, and upon the soft parts below the bandage, if continued twenty-four or forty-eight hours.

Ans.—If sufficiently tight to produce injury, the tendency would be a loss of vitality and sloughing of the parts mentioned.

Ques.—Would it be possible, or otherwise, in your opinion as a pathologist, to bandage any healthy part so tight as to injure the periosteum or the bone, without the effect being first to destroy or abrade the soft parts?

Ans.—I should think it would not be possible.

Ques.—What would be the effect of tying a half-inch rope around a healthy foot of a male adult fifty-seven years of age, as tight as a strong man could tie it, to remain there forty-eight hours, and what parts would become relatively affected?

Ans.—The effect would be loss of vitality and sloughing, and the soft parts would be first affected. The periosteum and the bone would be secondarily affected, if at all; and I am not sure that they would be affected at all in that space of time.

Ques.—Suppose, in addition, and connected with the hypothetical case submitted to you, there should appear, in ten or fifteen days, an abscess over the cuneiform bones, what would be your opinion, as a pathologist, as to the cause of such abscess, supposing it involved the destruction of the periosteum?

Ans.—I should regard it as involving some cause irrespective of the wound, or dressing.

Ques.—What is the comparative liability of the periosteum to take on disease, in connection with the other tissues of the foot?

Ans.—It is much less liable.

Ques.—Upon what cause, or causes, in your opinion, do abscesses and diseases of the bone generally depend?

Ans.—They generally depend upon constitutional causes.

Ques.—Is abscess likely to follow typhoid fever?

Ans.—I have observed abscess to follow typhoid fever. I have not observed disease of the bone to follow that fever, and I am not prepared to say how it is upon the authority of others.

Ques.—In case of an abscess of several days' standing over the cuneiform-tarsal bones, involving the complete destruction of the periosteum of the bone or bones immediately below the

abscess, where, in your opinion, did the disease commence, in the soft parts or in the bone?

Ans.—I should regard it as having commenced in the bone or periosteum.

Ques.—If amputation of the limb in case supposed became necessary, in fifteen or eighteen months after the injury was received, and the patient in the meantime was in the hands and under treatment from various physicians, state whether the ultimate cause of the amputation could be attributed, with any certainty, to that of the first physician in attendance in the case supposed?

Ans.—It would be difficult to do it.

Ques.—Of what medical works are you the author?

Ans.—I have written a work on Continued Fevers; one on Diseases of the Respiratory System, on Dysentery, on Chronic Pleurisy, and I have edited the Buffalo *Medical Journal*, in this city, for eight or nine years.

Ques.—Would you or not expect that the dressings to the foot, in either of the cases supposed, in the foregoing interrogatories, if not so tight as to injure the skin or to destroy the loose flap, could possibly lay the foundation for amputation?

Ans.—I should think it not possible.

Cross-examination by Plaintiff's Counsel.

Ques.—Might not amputation ultimately become necessary, by reason of too tightly bandaging the foot, and improperly dressing it on the first occasion, in the cases suggested in the second and third direct interrogatories?

Ans.—It might.

The cross-examination, which was lengthy, did not, in the least, shake the effect of the direct.

The following is the deposition of Prof. F. Hastings Hamilton:

Age forty-four years; Professor of Surgery in the Buffalo Medical College; am one of the surgeons to the Hospital of the Sisters of Charity in the city of Buffalo; have been engaged in the profession nearly twenty-five years.

In answer to the hypothetical case given to Prof. Flint, Prof H. said: I see nothing in this implying bad practice. I think the treatment on the second day was good treatment. I think the treatment indicated would have no influence to develop disease of the bone, and that it would be as well calculated as any treatment, to prevent it.

Ques.—State whether or not, in your opinion, it would be possible to bandage the foot, in the case supposed, so tight as to develop disease of the bone or of the periosteum, within twelve days, without seriously affecting the soft parts.

Ans.—I should think not.

Ques.—What is your opinion as to the effect of tight bandaging of the foot upon the flap separated by the axe, and upon the foot below the bandage, if continued twenty-four hours?

Ans.—It might produce sloughing of the flap, with swelling and discoloration of the portion of the foot below the bandage.

Ques.—Would it be possible, or otherwise, to bandage any healthy foot so tight as to injure the periosteum or the bone, without first destroying the soft parts or abrading the skin?

Ans.—I should think it not possible to bandage the foot so tight as to injure the periosteum and bones without first injuring the soft parts.

In answer to the question as to tying a rope around the foot, Dr. H. said:

There would probably be sloughing and ulceration of the soft parts, immediately under the rope, with swelling, discoloration, and perhaps gangrene of the portion of the foot below, subsequently to these occurrences—possibly subsequent disease of the bones. It is not probable that the bone would become diseased unless the rope was re-tightened. The periosteum is not so often diseased as the soft parts.

Ques.—Upon what cause or causes, in your opinion, do abscesses and diseases of the bone generally depend?

Ans.—Constitutional causes. These forms of disease sometimes follow typhoid fever.

Ques.—In case of an abscess of several days' standing, over the cuneiform bones, involving the complete destruction of the periosteum of these bones, immediately below the abscess, where, in your opinion, did the disease commence?

Ans.—In the bones. I should think the treatment, as detailed in the hypothetical questions, could not lay the ground for amputation. It is not an easy thing to excite disease in the bones of a healthy foot.

Ques.—Would it be possible or not, in the case supposed, to dress the foot so tight as to injure the bones, without completely destroying the flap.

Ans.—I can not say that it is impossible; but it seems to me scarcely possible, at least if we suppose the bones first took on disease, and that the abscess was the result of the disease of the bone. It is quite possible that an abscess, commencing in the soft parts, should ultimately extend to the bone, provided the state of the general system is not healthy.

Ques.—If the dressings in the case supposed were not so tight as to abrade or injure the skin of the foot, or materially hinder the healing process of the incised wound, could or not, such dressing lay the foundation for amputation?

Ans.—I think they could not.

Cross-examination.

Ques.—Might not amputation ultimately become necessary, by reason of too tightly bandaging and dressing the foot for the first time, in the case suggested by the defendant in the second interrogatory?

Ans.—The question does not suppose sufficient conditions for me to answer.

An extended cross-examination did not tend to weaken the defendant's case.

The result was that these two depositions so damaged the case of alleged Malpractice, that it went out of court without coming to trial.

CHAPTER XII.

DRUGGISTS—THEIR RESPONSIBILITIES——LEADING ADJUDICATED CASES.

It is a well-established principle of law, that a vender of provisions for domestic use is bound *to know* that they are sound and wholesome, at *his peril*.[1] It is an equally elementary principle, that in contracts for the sale of provisions, the party, by implication, who sells them, undertakes to guarantee that they are sound and wholesome.[2]

Blackstone also says: "Injuries affecting a man's health, are where, by any unwholesome practices of another, a man sustains any apparent damage, in his vigor or constitution, as, by selling him bad provisions or wine; by the exercise of noisome trade, or by the neglect or unskillful management of a physician, surgeon or *apothecary*—these are wrongs or injuries unaccompanied by force, for which there is a remedy in damages, by a special action on the case.[3]

These principles apply equally to druggists, physicians and chemists, who compound medicines, as to those who sell bread, meat, wines, etc. More care should be exercised by those who mix poisons for internal use, than is needed by those who sell fruit, food and the like. Bad wines, provisions, fruit and meat, can usually be at once detected by the senses; while the character of

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[1] Van Bracklin *v.* Fonda, 12 Johnson's Rep. 468.

[2] 3 Black. Com. 165.

[3] 3 Chitt. Black. 91.

medical substances and compounds are only discovered by the careful analysis of an experienced chemist.

A druggist, or one who prepares medicines, is held to a strict accountability in law, for any mistake he may make in compounding medicines.[1] He must be exact in preparing those powerful medicines, of which a very small dose may produce fatal consequences. If an apprentice of an apothecary is guilty of negligence, he is guilty of manslaughter, if fatal results follow.[2] In the Tessymond case, a mother sent to a chemist for a pennyworth of paregoric; the chemist's apprentice delivered a phial with a paregoric label on it, but with laudanum in it; six or seven drops were given to the child, supposing it to be paregoric, and killed it. The apprentice made the mistake from the circumstance that the laudanum bottle and the one containing paregoric stood side by side. BALEY, J., told the jury, "If you think there was negligence on the part of the prisoner, you will find him guilty; if not, you must acquit him." If any damages had resulted to the child, and not death, then the chemist would have been liable for the act of his agent, the apprentice.

So, where a chemist makes a mistake, when he is labeling medicines for the general market, if the medicine, in the course of trade, passes through many hands, and is finally bought and used by one who is injured thereby, the original maker is liable to the person so injured, and not the druggist, who, relying upon the correctness of the label, innocently sells the article for what it is not.

An important question with druggists has been how they shall best regulate the sale of poisonous drugs, without becoming liable, and prevent any mistakes or accidents that may prove fatal.

Some excellent suggestions on this subject were made by the American Pharmaceutical Association, at their annual meeting, held in Philadelphia, in September, 1857, in an appeal brought

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[1] Fleet & Semple *v.* Hollenkemp, 13 B. Monroe's Reps. p. 219.

[2] Tessymond's case, 1 Lewin's Crown Cases, 169.

forward by the Committee on Poisons, and adopted by the Association.

They say: "From the diversity of opinion among pharmaceutists in relation to the value and force of direct legislative action, in restricting the sale of poisonous substances, the Association does not deem it desirable to attempt at present the passage of laws in the different States bearing upon the subject; but, in place, offers to the pharmaceutist such suggestions as are deemed expedient under existing circumstances.

The Association suggests that the pharmaceutist should adopt rules in dispensing of poisons, by which he may remove from himself the responsibility of selling poisons for disreputable purposes, and protect the public both from mistakes occurring in his own premises and from the use of poisons for unlawful and criminal purposes.

That in selling any substance which would prove fatal in a dose of sixty grains by weight, or a fluid drachm by measure, you consider it poisonous, and mark the word 'poison,' in a distinct and unmistakeable manner, upon the label or package; that you consider the poisonous alkaloids and the like powerful substances *deadly poisons*, and so mark each package or label; that you make it an invariable rule to have every package of medicine dispensed at your counter plainly marked, whether it be an innocent or a poisonous one; that you, for the purpose of distinguishing, by the aid of color as well as of words, have the labels of the furniture of your establishment, which contains poisonous substances, of a peculiar color, and distinct from that of the rest of your labels; that you keep such furniture by itself, in order that it may not cause remark by customers; or that, in place of this suggestion, you adopt the practice of placing upon each bottle, or drawer, or package of such poisonous substances, some symbol, such as a bright red piece of paper, a triangle or Greek cross, or of other suitable form, thus giving the eye an additional means of cautioning you when handling such substances. That you print your dispensing labels for poisons upon a paper of an

entirely distinct color from that upon which your ordinary ones are printed; that in dispensing prescriptions containing poisonous substances, while you can not mark such 'poisonous,' unless so directed by the writer of the recipe, yet by marking a symbol in red ink upon the label of the medicine, you may avoid any mistake in its re-preparation, in putting up a poisonous substance for an innocent one; that, as an additional precaution, you adopt the practice of placing bands of rubber around the necks and over the stopples of bottles containing poisonous medicines in frequent use, or in some other manner delay slightly the opening of the bottle, so as to form an additional security and caution against mistake; that in preparing prescriptions you adopt this course: first carefully and understandingly read the recipe—then prepare it—then copy the receipt into a book provided for the purpose, with the date, name of prescriber and name of patient and directions; finally, place the number corresponding to the one on record upon the original recipe and the label, before delivering the medicine. In this way, any possible error in first reading the recipe may be discovered in recording it; and, secondly, you have a guide in the patient's name, by which you may avert evil consequences, should an error be discovered after the medicine has left the store; that you provide yourself with a book, in which to record every sale of poison, stating in each entry the date of sale, to whom sold, for what purpose desired, the quantity sold, and price received. This can be used as evidence in case of any blame being attached to you—in case of accident resulting from articles purchased of you; that you consider yourself responsible to the community in which you live, where there may be no legislative control to the sale of poisons, and that you be particular, when furnishing poisons to applicants for such, to assure yourself, by the appearance of the customer, and by proper inquiry of them, that no disreputable, illegal or criminal purpose is intended; that you require a written order from a physician, or other responsible party, to accompany any application for a poisonous substance presented by a person under

fifteen years of age; that in all cases in dealing out poisonous drugs, in your business, to applicants in person, you be particular to caution them in regard to the properties and proper methods of using them; that you entirely refuse to dispense oils of savin and tanzy, of ergot, and of substances of similar effect upon the economy, unless upon the written prescription of a physician.

The Association trusts that this appeal to pharmaceutists, many of whom have not yet felt the force and weight of the responsibility resting upon them, will awaken them to a sense of their accountability, morally and otherwise, and be conducive to individual safety and public welfare."

If druggists will act upon these wholesome suggestions, they will be less often arraigned in court; and when it does happen, they will have in their own hands the evidence of their innocence, and be able to show upon whom the responsibility ought to rest.

THOMAS AND WIFE *v.* WINCHESTER; 2 Selden's Reps., N. Y. Court of Appeals, 397.

This was an action for damages, in the Supreme Court, commenced in August, 1849, against Winchester and Gilbert, for injuries sustained by Mrs. Thomas, from the effects of a quantity of extract of belladonna, administered to her by mistake, as the extract of dandelion.

In the complaint it was alleged that the defendants, from the year 1843 to the 1st of January, 1849, were engaged in putting up and vending certain vegetable extracts, at a store in the city of New York, designated as "108 John street," and that the defendant, Gilbert, had, for a long time previous thereto, been engaged at the same place; that among the extracts so prepared, and sold by them, were those respectively known as the "extract of dandelion" and the "extract of belladonna"—the former a mild and harmless medicine, and the latter a vegetable poison, which, if taken in such quantity as might be safely administered of the former, would destroy life, or seriously impair the health of the person to whom the same might be administered; that at

some time between the periods above mentioned, the defendants put up and sold to James S. Aspinwall, a druggist in the city of New York, a jar of the extract of belladonna, which had been labeled by them as the extract of dandelion, and was purchased of them as such by said Aspinwall; that said Aspinwall afterward, and on the 10th of May, 1845, relying upon the label so affixed by the defendants, sold the said jar of belladonna to Alvin Foord, a druggist, of Cazenovia, in Madison county, as the extract of dandelion; that afterward, and on the 27th of March, 1849, the plaintiff, Mrs. Thomas, being sick, a portion of the extract of dandelion was prescribed for her by her physician, and the said Alvin Foord, relying upon the label affixed by the defendant to said jar of belladonna, and believing the same to be the extract of dandelion, did, on the application of the plaintiff, Samuel Thomas, sell and deliver to him, from the said jar of belladonna, a portion of its contents, which was administered to the plaintiff, Mrs. Thomas, under the belief that it was the extract of dandelion, by which she was greatly injured, so that her life was despaired of, etc. The plaintiff also alleged that all the injury was occasioned by the negligence and unskillfulness of the defendant, in putting up and falsely labeling the jars of belladonna as the extract of dandelion, whereby the plaintiffs, as well as the druggists, and all other persons through whose hands it passed before being administered as aforesaid, were induced to believe, and did believe, that it contained the extract of dandelion. Wherefore, etc.

The defendants, in their answers, severally denied the allegations of the complaint, and insisted that they were not liable for the medicines sold by Aspinwall and Foord.

The cause was tried at the Madison Circuit, in December, 1849, before Mason, J. The defendant, Gilbert, was acquitted by the jury, under the direction of the court, and a verdict was rendered against Winchester for eight hundred dollars. A motion was made for a new trial upon the bill of exceptions taken at the trial, and having been denied at a General Term in the Sixth

District, the defendant, Winchester, brought his appeal. The facts which appeared on trial are sufficiently stated in the opinion of RUGGLES, Ch. J.

It was claimed, on the part of the appellant, that there was no connected transaction or privity between Mrs. Thomas, the real plaintiff in this suit, and the defendant; no state of things to render legally possible the allegation of negligence *quo ad hoc*, and therefore no suit can be sustained by her against the defendant. The defendant sold the article to Aspinwall; Aspinwall sold to Foord; Foord sold to Thomas, the husband, who administered, or caused it to be administered to the plaintiff. The defendant was a *remote* vender of the article, and can not be liable to this plaintiff. The *gravamen* of the complaint is negligence, in selling the article with a wrong label; no fraud, or criminal, or evil motive or intent, and not even gross negligence is imputed; and nothing in the nature of contract is pretended. It was said this differs in no respect from any other case of negligence alleged against a party standing at the same remove from the party alleging it. If this action can be sustained, it could equally be sustained in any of the following cases: A builds a vessel and sells it to B; B sells it to C, and D takes passage in it: the mast, by reason of great negligence in its construction, falls on D and breaks his limb. D can sustain an action against A for the injury. Again, it was said, a blacksmith shoes a horse for A; A sells the horse thus shod to B; B sells to C., and the horse, while being used by C., stumbles and falls, in consequence of gross negligence in the shoeing. C can sue the smith and recover damages.

A negligently sells unwholesome provisions to B; B sells to C, who sells to D, and D uses the provisions and is injured. D can sustain an action against A. The very statement of these illustrations, it was said, ought to demonstrate the fallacy of the claim of the plaintiff. In the case of The Mayor of Albany *v.* Cunliff, 2 Comst. 180, it is said: "The reason why an action can not be sustained, in such cases, is, that there is no connection

between the wrong done and the person whom it is sought to charge for the consequences."

It was also claimed, on the part of the defense, that if this action was sustained, the defendant might be liable to innumerable suits, and at any period of time, however distant. No statute of limitations could protect him, for the action would not be barred until six years after the injury, although the defendant may have sold the article many years before. He would be liable, too, for the carelessness of all intermediate venders, and this without notice of the dangers or the means of averting it. Besides, if this defendant is liable, such liability may be traced back indefinitely, to a vender at the fiftieth or hundredth remove from the plaintiff. A doctrine involving such consequences can not be sustained. The defendant was charged substantially with the negligence of Foord and Aspinwall, and this can not be the foundation of an action against him.[1]

The rule sought to be applied to the case by the defendant was, that each vender is liable to his immediate vendee, for any damage legitimately sustained by the latter. It was said this rule is just and safe, and a sufficiently comprehensive one. It furnishes adequate protection to all parties, and gives the purchaser his remedy against the person in whom, by the very act of purchase, he shows that he placed reliance.[2] If the label affixed to the article in question could be deemed a false affirmation to each party relying upon it when buying, it could be available to a party only who should purchase on the credit given to the label. Here there is no pretense that the real plaintiff bought at all; or even that her husband, or his agent, ever saw the label, or acted on the faith of it. No such fact is alleged in the complaint.

These were the grounds assumed, and undoubtedly the strongest that could be taken by the defense.

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[1] Mayor of Albany *v.* Cunliff, 2 Comst. 165—180; Blunt *v.* Aiken, 15 Wend. 522; Shiells *v.* Blackburn, 1 H. Bl. 158.

[2] Broom on Parties to Actions, Sec. 299, p. 248.

On the part of the respondent, by *N. Hill, jr.*, it was argued:

1. That by affixing a false label to the poison, and sending it into market in that condition, so as thereby to mislead others, and endanger human life, was an *unlawful act*, for which the defendant is responsible, whether he did it *wilfully* or *negligently*.[1]

2. To entitle the aggrieved party to sue in such case, no priority is necessary, except such as is created by the unlawful act, and the consequential injury; priority of contract being out of the question.[2]

3. The injury is not rendered too remote to sustain a recovery because separated from the unlawful act by intervening events, however numerous, or of whatever kind, provided they are the *natural and probable consequences* of the act; *i. e.*, such as would be likely to follow, and might be easily foreseen.[3] Where the unlawful act is, in its nature, likely to produce the very events which have followed, the author of it may be treated as having caused such succeeding events, though they consisted of the acts of third persons. *Causa causæ est causa causati.*[4]

The false label was not only likely to lead druggists and others into the mistakes which have followed, but such was its direct and inevitable tendency.[5] The rule contended for, it was said, did not extend the sphere of accountability to impracticable or unjust limits, but confines it to consequences so proximate as to be expected or readily foreseen, and for which every wrong-doer is, and ought to be answerable. If the defendant's act had been

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[1] 5 Maule & Sel. 198; 4 Denio, 464, 466-7; 10 Eng. Com. Law. R. 190; 6 Hill, 292; 23 Eng. Com. Law R. 52; 2 W. Bl. 892-3; 19 John. 381; 3 Maule & Sel. 11, 14, 15; 11 Mass. 159; 17 Wend. 499, 500; 5 Denio, 266.

[2] 1 Chitty's Gen. Pr. 12; 10 Eng. Com. Law R. 190; 12 Mod. 639; 4 Denio, 464; 11 Price, 400; 35 Eng. Com. Law R. 292; 6 Hill, 294.

[3] 1 Smith's Lead. Cases, 132, note; 23 Eng. Com. Law R. 54-5; 5 Denio, 266

[4] 19 John. 381; 4 Denio, 464; 2 W. Bl. 892-3-4, 899, 900; Broom's Leg. Max. 168-9; 5 Maul. & Sel. 198; 41 Eng. Com. Law R. 425; 24 Id. 272; 23 Id. 523; 28 Id. 222; 12 Mod. 639; 19 Wend. 345-6; 4 Denio, 317; 2 Wend. 385; 3 Metc. 469; 2 Mees & Welsb. 519, 525.

[5] Eng. Com. Law R. 41-2; 3 Met. 469.

done willfully, he would have been chargeable with the consequences, including the mistake of Dr. Foord, etc., on the legal presumption that he intended them.[1] The sphere is the same, so far as responsibility is concerned, when the wrong consists of negligent acts, though the measure of indemnity and punishment may be different.[2] There is no pretense for saying that the injury was caused by the illegal act of a third person, and not by that of the defendant; the jury having directly found that the intermediate actors were not negligent. This rule never applies when the intervening wrong does not furnish a distinct right of action for the whole injury sustained. Mrs. Thomas could not get redress by an action *ex-contractu* against Dr. Foord, or any one else; and to apply the rule here, therefore, would contravene the maxim, *ubi jus ibi remedium*. Again, the rule does not apply when the intervening wrong, though actionable, is the *natural* and probable consequence of the defendant's tort.[3]

But the injury in this case was the immediate consequence of the defendant's act. The false label was a continuing representation or direction by him, and operated as the instantaneous cause of the mistake of Dr. Foord.[4]

The injury being sufficiently connected with the defendant's wrongful act, it is no defense that he had parted with the poison under a formal sale, and placed it in the custody of others—this being the very mode by which he caused the injury. The inability of the defendant to prevent the injury at the time, is not an excuse, but part of the wrong. Besides, the label was a continuing authority, or direction, by the defendant, for the use

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[1] 3 Bouv. Inst. 348; 16 Wend. 649; 3 Metc. 469—472.

[2] Archb. Cr. Pl. 421. 2d ed. 1848; 2 Ld. Ray. 1583; 23 Eng. Com. Law R. 54–5; 3 Maule & Sel. 14, 15; 1 Lewin's Cr. Cases, 169; 2 Stark Ev. 526, Am. ed. 1837; 5 Maule & Sel. 198; Broom's Leg. Max. 168–9; 4 Denio, 464; 41 Eng. Com. Law R. 422; 24 Id. 272; 19 Wend. 345–6.

[3] 1 Smith's Lead. Cases, 132, note; Brown's Leg. Max. 168–9; 5 Barn. & Cres. 356; 23 Eng. Com. Law R. 52, 54; Id. 422, 425; 24 Id. 272; 5 Maule & Sel. 198; 19 Wend. 345–6; 2 Mees & Welsb. 519, 525; 5 Denio, 266.

[4] 23 Eng. Com. Law R. 41–2; 6 Metc. 469; 1 Id. 193.

of the poison, and he was bound to indemnify against the acts which it was likely to cause when sold in that condition.[1]

The rule contended for by the defendant, that each vender is liable only to his immediate vendee, has no application to the present case. This rule is founded on the principle that a right or duty wholly created by contract, can only be enforced between the contracting parties.

In any view of the case, the defendant, it must be admitted, is ultimately responsible for the injury to Mrs. Thomas, unless those who have been the unconscious agents of the wrong are to bear the burden, and *the author of it to escape;* and the law does not require circuity of action, but abhors it.[2]

The opinion of the court, by Chief-Justice RUGGLES, is of great ability, and undoubtedly embodies the law in this class of cases. We therefore give it entire:

"This is an action brought to recover damages from the defendant for negligently putting up, labeling and selling as and for the extract of dandelion, which is a simple and harmless medicine, a jar of the extract of belladonna, which is a deadly poison; by means of which the plaintiff, Mary Ann Thomas, to whom, being sick, a dose of dandelion was prescribed by a physician, and a portion of the contents of the jar was administered as and for the extract of dandelion, was greatly injured, etc.

The facts proved were briefly these: Mrs. Thomas, being in ill health, her physician prescribed for her a dose of dandelion. Her husband purchased what was believed to be the medicine prescribed, at the store of Dr. Foord, a physician and druggist in Cazenovia, Madison county, where the plaintiff resides.

A small quantity of the medicine thus purchased was administered to Mrs. Thomas, on whom it produced very alarming

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[1] 12 Mod. 639; 23 Eng. Com. Law R. 41–2; Id. 52, 54–5; 28 Id. 220; 3 Metc. 469; 4 Denio, 311, 317; 2 Comst. 180; 19 Wend. 345–6.

[2] 2 Saund. 150, per Kelynge, C. J.: Willis' R. 401–2; 2 H. Bl. 350–1, per Heath, J.; 4 Wend. 492, per Marcy, J.; Co. Litt. 348, a.

effects—such as extreme coldness of the surface and extremities, feebleness of circulation, spasms of the muscles, giddiness of the head, dilation of the pupils of the eyes, and derangement of the mind. She recovered, however, after some time, from its effects, although, for a short time, her life was thought to be in great danger. The medicine administered was *belladonna, and not dandelion.* The jar from which it was taken was labeled, "½ lb *dandelion, prepared by A. Gilbert, No.* 108 *John street, N. Y., Jar* 8 *oz.* It was sold for, and believed by Dr. Foord to be, the extract of dandelion, from Jas. S. Aspinwall, a druggist at New York. Aspinwall bought it of the defendant as extract of dandelion, believing it to be such. The defendant was engaged at No. 108 John street, New York, in the manufacture and sale of certain vegetable extracts, for medicinal purposes, and in the purchase and sale of others. The extracts manufactured by him were put up in jars for sale, and those which he purchased were put up by him in like manner. The jars containing extracts manufactured by himself, and those containing extracts purchased by him from others, were labeled alike. Both were labeled like the jars in question, as "prepared by A. Gilbert." Gilbert was a person employed by the defendant at a salary, as an assistant in his business. The jar was labeled in Gilbert's name because he had been previously engaged in the same business, on his own account, at No. 108 John street, and probably because Gilbert's labels rendered the articles more salable. The extract contained in the jars sold to Aspinwall, and by him to Foord, was not manufactured by the defendant, but was purchased by him from another manufacturer or dealer. The extract of dandelion and the extract of belladonna resemble each other in color, consistence, smell and taste; but may, on careful examination, be distinguished, the one from the other, by those who are well acquainted with these articles. Gilbert's labels were paid for by Winchester, and used in his business with his knowledge and consent.

The defendants' counsel moved for non-suit on the following grounds:

1. That the action could not be sustained, as the defendant was the remote vender of the article in question, and that there was no connection, transaction or privity between him and the plaintiffs, or either of them.

2. That this action sought to charge the defendant with the negligence of Aspinwall and Foord.

3. That the plaintiffs were liable to and chargeable with the negligence of Aspinwall and Foord, and therefore could not maintain this action.

4. That, according to the testimony, Foord was chargeable with negligence, and that the plaintiffs therefore could not sustain this suit against the defendant. If they could sustain a suit at all, it would be against Foord only.

5. That this suit, being brought for the benefit of the wife, and alleging her as the meritorious cause of action, can not be sustained.

6. That there was not sufficient evidence of negligence, on the part of the defendant, to go to the jury.

The Judge overruled the motion for non-suit, and the defendants' counsel excepted.

The Judge, among other things, charged the jury that if they should find from the evidence that either Aspinwall or Foord was guilty of negligence in vending as and for dandelion the extract taken by Mrs. Thomas, or that the plaintiff, Thomas, or those who administered it to Mrs. Thomas, were chargeable with negligence in administering it, the plaintiffs were not entitled to recover; but if they were free from negligence, and if the defendant, Winchester, was guilty of negligence in putting up and vending the extracts in question, the plaintiffs were entitled to recover, provided the extract administered to Mrs. Thomas was the same which was put up by the defendant and sold by him to Aspinwall, and by Aspinwall to Foord. That if they should find

the defendant liable, the plaintiffs in this action were entitled to recover damages only for personal injury and suffering of the wife, and not for loss of service, medical treatment or expense to the husband, and that the recovery should be confined to the actual damage suffered by the wife.

The action was properly brought in the name of the husband and wife for the personal injury and suffering of the wife, and the case was left to the jury with the proper directions on that point.

The case depends on the first point taken by the defendant, on his motion for a non-suit; and the question is, whether the defendant, being a remote vender of the medicine, and there being no privity or connection between him and the plaintiffs, the action can be maintained.

If, in labeling a poisonous drug with the name of a harmless medicine, for public market, no duty was violated by the defendant, excepting that which he owed to Aspinwall, his immediate vendee, in virtue of his contract of sale, this action can not be maintained. If A build a wagon and sell it to B, who sells it to C, and C hires it to D, who, in consequence of the gross negligence of A in building the wagon, is overturned and injured, D can not recover damages against A, the builder. A's obligation to build the wagon faithfully, arises solely out of his contract with B. The public have nothing to do with it. Misfortune to third persons, not parties to the contract, would not be a natural and necessary consequence of the builder's negligence; and such negligence is not an act immediately dangerous to human life.

So, for the same reason, if a horse be defectively shod by a smith, and a person hiring the horse from the owner is thrown and injured in consequence of the smith's negligence in shoeing, the smith is not liable for the injury. The smith's duty, in such case, grows exclusively out of his contract with the owner of the horse; it was a duty which the smith owed to him alone, and to no one else; and although the injury to the rider may have happened in consequence of the negligence of the smith, the latter

was not bound, either by his contract or by any consideration of public policy or safety, to respond for his breach of duty to any one except the person he contracted with.

This was the ground on which the case of Winterbottom *v.* Wright was decided. A contracted with the Postmaster-General to provide a coach to convey the mail-bags along a certain line of road, and B and others also contracted to furnish horses for coach along the same line. B and his co-contractors hired C, who was the plaintiff, to drive the coach. The coach, in consequence of some latent defect, broke down; the plaintiff was thrown from the seat and lamed. It was held that C could not maintain an action against A for the injury thus sustained. The reason of the decision is best stated by Baron Rolfe. A's duty to keep the coach in good condition was a duty to the Postmaster-General, with whom he made his contract, and not a duty to the driver employed by the owners of the horses.

But the case in hand stands on a different ground. The defendant was a dealer in poisonous drugs; Gilbert was his agent in preparing them for the market. The death or great bodily harm of some person was the natural and almost inevitable result of the sale of belladonna, by means of the false label.

Gilbert, the defendant's agent, would have been punished for manslaughter, if Mrs. Thomas had died in consequence of taking the falsely-labeled medicine. Every man who, by his culpable negligence, causes the death of another, although without intent to kill, is guilty of manslaughter.

'So highly does the law value human life, that it admits of no justification, wherever life has been lost, and the carelessness or negligence of one person has contributed to the death of another;'[1] and this rule applies not only where the death of one is occasioned by the negligent act of another, but where it is caused by the negligent omission of duty of that other.[2] Although the

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[1] Regina *v.* Swindall, 2 Car. & Kir. 232–3.

[2] 2 Car. & Kir. 368, 371.

defendant, Winchester, may not be answerable criminally for the negligence of his agent, there can be no doubt of his liability in a civil action, in which the act of the agent is to be regarded as the act of the principal.

In respect to the wrongful and criminal character of the negligence complained of, this case differs widely from those put by the defendant's counsel. No such imminent danger existed in those cases. In the present case, the sale of the poisonous article was made to a dealer in drugs, and not to a consumer. The injury, therefore, was not likely to fall on him, or on his vendee, who was also a dealer; but much more likely to be visited on a remote purchaser, as actually happened. The defendant's negligence put human life in imminent danger. Can it be said that there was no duty, on the part of the defendant, to avoid the creation of that danger by the exercise of greater caution, or that the exercise of that caution was a duty only to his immediate vendee, whose life was not endangered? The defendant's duty arose out of the nature of his business, and the dangers to others incident to its mismanagement. Nothing but mischief like that which actually happened could have been expected from sending the poison falsely-labeled into the market; and the defendant is justly responsible for the probable consequences of the act. The duty of exercising caution in this respect did not arise out of the defendant's contract of sale to Aspinwall. The wrong done by the defendant was in putting the poison, mis-labeled, into the hands of Aspinwall, as an article of merchandise, to be sold, and afterward used as the extract of dandelion, by some person then unknown. The owner of a horse and cart, who leaves them unattended in the street, is liable for any damage.[1] The owner of a loaded gun, who puts it into the hands of a child, by whose indiscretion it is discharged, is liable for the damage occasioned by the discharge.[2] The defendant's contract of sale to Aspinwall

[1] Lynch *v.* Nardin, 1 Ad. & Ellis, N. S. 29; Illidge *v.* Goodwin, 5 Car. & Payne, 190.

[2] 5 Maule & Sel. 198.

does not excuse the wrong done to the plaintiffs. It was a part of the means by which the wrong was effected. The plaintiffs' injury and their remedy would have stood on the same principle, if the defendant had given the belladonna to Dr. Foord without price, or if he had put it in his shop without knowledge, under circumstances which would probably have led to its sale on the faith of the label.

In Longmeid *v.* Holliday,[1] the distinction is recognized between an act of negligence immediately dangerous to the lives of others, and one that is not so. In the former case, the party guilty of negligence is liable to the party injured, whether there be a contract between them or not; in the latter, the negligent party is liable only to the party with whom he contracted, and on the ground that negligence is a breach of the contract.

The defendant, on the trial, insisted that Aspinwall and Foord were guilty of negligence in selling the article in question for what it was represented to be in the label; and that the suit, if it could be sustained at all, should have been brought against Foord. The Judge charged the jury that if they, or either of them, were guilty of negligence in selling the belladonna for dandelion, the verdict must be for the defendant, and left the question of negligence to the jury, who found on that point for the plaintiff. If the case really depended on the point thus raised, the question was properly left to the jury. But I think it did not. The defendant, by affixing the label to the jar, represented its contents to be dandelion, and to have been "prepared" by his agent, Gilbert. The word 'prepared,' on the label, must be understood to mean that the article was manufactured by him, or that it had passed through some process under his hands, which would give him personal knowledge of its true name and quality. Whether Foord was justified in selling the article upon the faith of the defendant's label, would have been an open question by the

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[1] 6 Law and Eq. Rep. 562.
See, also, Barnes *v.* Ward, 9 C. B. 392.

plaintiffs against him, and I wish to be understood as giving no opinion on that point. But it seems to me to be clear that the defendant can not, in any case, set up as a defense, that Foord sold the contents of the jar as and for what the defendant represented it to be. The label conveyed the idea distinctly to Foord that the contents of the jar was the extract of dandelion, and that the defendant knew it to be such. So far as the defendant is concerned, Foord was under no obligation to test the truth of the representation. The charge of the Judge, in submitting to the jury the question in relation to the negligence of Foord and Aspinwall can not be complained of by the defendant.

GARDINER, J., concurred in affirming the judgment, on the ground that selling the belladonna without a label indicating that it was a *poison*, was declared a misdemeanor by statute;[1] but expressed no opinion upon the question whether, independent of the statute, the defendant would have been liable to these plaintiffs.

GRIDLEY, J., was not present when the cause was decided. All the other members of the court concurred in the opinion delivered by Ch. J. RUGGLES.

Judgment affirmed."

This decision, and the reasons upon which it is based, settles the question, as to the responsibility of druggists and manufacturers of medicines, if the medicine is not what it purports to be; and it should be so. Those who assume the responsible position of making and vending powerful medicines, should be held to a rigid responsibility, because, after the compound has left the hands of the chemist, not one person in ten thousand can detect an error, if there is one, however dangerous it may be.

In the above case, the Judges, after coming face to face with the question, whether the intermediate venders were also liable in damages, and looking at it fearfully, thought best to give no opinion on that point. The charge of the court below had been,

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[1] 2 R. S. 694, sec. 23.

that if there had been any carelessness on the part of Aspinwall or Foord, then judgment must be for the defendants; that if they trusted to the label as indicating the article sold, then they were innocent. It is probable that if the Superior Court had given an opinion on this point, it would have been, that druggists have a right to expect that a medicine is what its label indicates, especially if prepared by a respectable and well-known manufacturer.

If this was not the rule, every vender, whether druggist or not, would have to keep a chemist, in whom he had confidence, to analyze every article he sold, which would certainly defeat a convenient and general supply. It is probable that the importer of foreign preparations would not be protected by the label of a foreign manufacturer.

FLEET & SEMPLE *v.* HOLLENKEMP; 13 B. Monroe, 219.

Another important case, involving some new and important points, concerning the rights and responsibilities of druggists, as well as of the purchaser, was decided in 1852, in Kentucky.

John Hollenkemp sued Wm. T. Fleet and Samuel P. Semple, partners in the business of vending drugs by retail, in an action upon the case, for having, through negligence, permitted a portion of the poisonous drug called cantharides to be intermingled with some snakeroot and Peruvian bark, which he had purchased at their drug store, and which he, being then indisposed, by the advice of his physician, had taken as medicine for his restoration, not knowing that the poison had been mixed with the bark and snakeroot, and that, in consequence, he had been made very sick, endured great suffering, pain and agony, and that his health had been thereby permanently injured. The defendants appeared and pleaded not guilty. There was a trial, verdict, and judgment against the defendants for $1,141 75 damages, and costs of suit.

The defendants moved the court to set aside the verdict and judgment, and grant a new trial, upon various grounds.

One ground was, that the damages found by the jury were excessive, and unwarranted by the facts of the case, and the proof in the cause.

Another reason was, that the court erred in giving the instructions asked by the plaintiff's counsel, and in refusing those asked by the counsel of the defendants.

The court refusing to grant a new trial, the defendants filed their bill of exceptions to these rulings of the court, and appealed to the Court of Appeals. The evidence was reduced to writing, and accompanied the appeal. It was, in substance, as follows: The plaintiff, having been sick for some time, had improved, and was convalescent. A tonic preparation was recommended by the attending physician, who made out a written prescription for the plaintiff, as follows: that he should procure two ounces of snakeroot and two ounces of Peruvian bark, in the form of powder, to be mixed and divided into four portions; to be made into a tea, by the application of three pints of water to each portion of snakeroot and bark; the patient to take half of a tea-cup full of the decoction twice each day. This prescription was sent by the plaintiff to the defendants' drug store, to be filled. There the two ounces of snakeroot and Peruvian bark were, by the clerk, in the presence of one of the defendants, put into a mill to be ground into powder, and passed through the mill thus pulverized. It was then put up in separate papers, as directed by the prescription, and delivered to the plaintiff's messenger, who carried them to the plaintiff. A tea was made of one of the potions. The patient drank a half tea-cup full of the preparation, and shortly afterward the effect produced by the dose was so unexpected and so extraordinary, that the same physician was sent for who had drawn up the prescription, who, upon his arrival, found his patient laboring under all those violent symptoms which, according to all the evidence on the subject, are produced by cantharides, when taken in sufficient quantity into the stomach. The physician's suspicions being aroused, he procured and examined the three remaining potions of medicine, as com-

pounded at defendants' drug store, and easily detected the presence of Spanish flies in the mixture. They were taken to the drug store to inquire into the matter. There the potions were recognized as having been compounded and put up in that store, by the clerk, and the fact that some Spanish flies had been, in some way, mixed with the bark and snakeroot, was detected and admitted.

The effects upon the patient, from the proof, were most violent, dangerous and excruciating, and precisely such as would be produced by a sufficient dose of cantharides. There was a contrariety of opinion expressed by the physicians examined, as to the durability and permanency of the injurious effects produced by this drug. The attending physician gave it as his opinion that the symptoms exhibited were produced by the cantharides, and that the plaintiff's health had been permanently injured by the dose which he had taken. Several other doctors examined, gave it as their opinion that, generally, the effects of this drug, unless taken in sufficient quantity to produce death, would be only temporary and evanescent; that they had never known an instance where the health of a person surviving the immediate effects produced by cantharides had been permanently injured, though they did not deny but that such might be the consequence in some cases, where the peculiar condition of the patient's system was such as that the poisonous quality of the drug might be more pernicious and virulent in its effects, and that in special cases it might cause permanent ill health.

There was evidence introduced by the defendants which was intended to screen and exempt them and their agent, the clerk, from the charge or imputation of having been guilty of inexcusable negligence in compounding and putting up the medicines, as required by the prescription furnished by the plaintiff's medical adviser.

The physicians examined as witnesses, all concur in proving that the violent and injurious effects produced upon the plaintiff by the dose which had been taken by him, could not have

resulted, if it had contained nothing but the snakeroot and Peruvian bark; that, when taken in the quantities as administered to the plaintiff, they are harmless and innocent drugs, and the fact, as deduced from all the testimony in the case, is conclusively established, that, although the plaintiff sent them a prescription for snakeroot and Peruvian bark only, the defendants, being druggists, sent him in return—say by mistake—a compound made up of the drugs required, intermixed with a most pernicious and deleterious poison, which, in fact, bears no kind of resemblance to the medicines named in the prescription, and the mingling of which with innocent medicines, sent for by plaintiff, was caused by improperly pulverizing the root and the bark, by grinding them in the same mill in which Spanish flies had been previously ground.

Several grounds were taken for a new trial, which do not concern us here. But upon the question of excessive damages, which was presented as a reason for a new trial, the court said:

"There is no fixed and certain criterion of damages for personal injuries, similar to those sustained by the plaintiff in this action. The question as to their amount is within the sound and reasonable discretion of the jury. The damages given may be more or less exemplary, or otherwise, as the circumstances of aggravation or extenuation, characterizing each particular case, may reasonably require. There is a class of personal injuries, such as slander, libel, malicious prosecution, and including injuries to a person's health, business and property, caused by indirect means, unattended with force, and for redress of which the remedy is by an action upon the case, and not trespass, for which a jury may give exemplary damages, as well when the action is in case as where it is in trespass; and whether exemplary damages should or should not be given, does not depend upon the form of action, so much as upon the nature and extent of the injury done, and the manner in which it was inflicted, whether by negligence, wantonness, or with or without malice. In the present case, the damages given by the jury,

($1,141 75,) can not be considered as so excessive as to authorize this court to reverse the judgment on that ground. From the evidence in the cause, the jury had the opportunity and the right to decide the question of fact as to the extent of injury done to the plaintiff's health, and if the injury was considerable, protracted or permanent, the amount of damages found by them was, if even sufficient, not excessive, and the verdict and judgment ought not, on that ground, to be disturbed.

But it is urged that the Circuit Judge improperly instructed the jury upon the law of the case. Upon motion of the attorney for the plaintiff, the court gave the following instruction: No. 1. If the jury believe, from the evidence, that the defendants, Fleet & Semple, were the proprietors of the drug store, in the city of Covington, at which the prescription alluded to in evidence, made for the plaintiff by Dr. Whitehouse, was compounded, and that said *prescription*, as put up at said drug store, contained Spanish flies, or cantharides, and that the plaintiff, in consequence of taking a part of it, was made sick or injured thereby, they ought to find for the plaintiff, even although they may believe that defendants were ignorant of the fact that said prescription did contain said ingredient. Although the words of the instruction are injudiciously selected and arranged, yet if its meaning is not misapprehended, it embraces in its terms a proposition of law pertinent to the case, and applicable to the facts presented to the jury by the evidence. Of course, the attorney who wrote the instruction, and the Judge who gave it, in using the expression as to the "prescription containing Spanish flies," and as to the plaintiff's having taken a portion of the prescription, etc., have reference to the mixture compounded at the drug store, and not to the written prescription of the physician, intended as a direction to the druggist as to the drugs to be compounded. If the plaintiff sent a prescription to the defendants' drug store, in filling such prescription, whether ignorantly or by design—whether with or without the knowledge of the defendants, they being proprietors, did intermix the poisonous drug cantharides, or Spanish

flies, with the bark and snakeroot; and if, in taking this preparation, or mixture, as medicine, the plaintiff was injured, the defendants, being owners of the drug store, are legally responsible in damages to the plaintiff for the accident, if it was one, and for the outrage, if it was designed.

Now, if a man who sells fruits, wines and provisions, is bound, at his peril, that what he sells for the consumption of others shall be good and wholesome, it may be asked, emphatically, is there any sound reason why this conservative principle of law should not apply with equal, if not with greater, force to venders of drugs from a drug store, containing, as from usage may be presumed, a great variety of vegetable and mineral substances of poisonous properties, which, if taken as medicines, will destroy health and life, and the appearances of which are known to but few, except they be chemists, druggists or physicians. The purchasers of wines and provisions, by sight, smell and taste, may be able, without incurring any material injury, to detect their bad and unwholesome qualities; but many are wholly unable, by the taste or appearance of many drugs, to distinguish those which are poisonous from others which are innoxious, so close is their resemblance to each other. Purchasers have, therefore, to trust the druggist. It is upon his skill and prudence they must rely. It is, therefore, incumbent upon him that he understands his business. It is his duty to know the properties of his drugs, and to be able to distinguish them from each other. It is his duty so to qualify himself, or to employ those that are so qualified, to attend to the business of compounding and vending medicines and drugs, as that one drug may not be sold for another, and so that, when a prescription is presented to be made up, the proper medicine, and none other, be used in mixing and compounding it. As applicable to the owners of drug stores, or persons engaged in vending drugs and medicines by retail, the legal maxim should be reversed. Instead of *caveat emptor*, it should be *caveat vendor*. That is to say, let him be certain that he does not sell to a purchaser or send to a patient one thing for another, as arsenic

for calomel, cantharides for or mixed with snakeroot and Peruvian bark, or even one innocent drug, calculated to produce a certain effect, in place of another, sent for and designed to produce a different effect. If he does these things, he can not escape civil responsibility, upon the alleged pretext that it was an accidental or an innocent mistake; that he had been very careful and particular, and had used *extraordinary care and diligence* in preparing and compounding the medicines, as required, etc. Such excuses will not avail him, and he will be liable, at the suit of the party injured, for damages, at the discretion of the jury.

The defendants' attorney moved the court to instruct the jury as follows: 1. If, from the evidence, the jury believe that the defendants, in preparing the prescription, used due and reasonable skill, care and diligence, they must find for the defendants. 2. If, from the evidence, the jury believe that the defendants, in putting up the prescription, used extraordinary or unusual care, they must find for the defendants.

These instructions were not given, but properly refused by the court. The rule as to the degree of care and diligence necessary to be used in certain cases to exempt a party from liability, and as to the extent or degree of negligence necessary to devolve civil responsibility upon the party guilty thereof, do not apply to the present and similar cases. It is absurd to speak of degrees of diligence and of negligence, as excusing or not excusing, or as settling the question of liability or no liability, in a case where the vender of drugs, being required to compound innocent medicines, runs them through a mill in which he knew a poisonous drug had shortly before been ground. If a mistake or accident could excuse the sending of a medicine different from that applied for, which we do not admit, and can not readily conceive, there could have been neither mistake nor accident in this case, because the fact of the previous use of the mill was known to the venders, and they are absolutely responsible for consequences which that knowledge enabled them and made it their duty to avoid. Even accidents or mistakes should not occur in a business of this

nature, and they can not, ordinarily, occur without there has been such a degree of culpable, if not wanton and criminal, carelessness and neglect, as must devolve upon the party unavoidable and commensurate responsibility. We were asked, by the attorneys, in their arguments, with some emphasis, if druggists are to be, in legal estimation, regarded as 'insurers?' The answer is, that we see no good reason why a vender of drugs should, in his business, be entitled to a relaxation of the rule which applies to venders of provisions—which is, that the vender undertakes and insures that the article is wholesome. Sound public policy, in relation to the preservation of health, and even of life, would seem to require that this rule should have a rigid and inflexible application to cases similar to the one under consideration. As the responsibility of the defendants in this case does not depend upon the degree of care, or diligence, or negligence used by them, but upon the naked fact, that when requested to compound a medicine for plaintiff, to be composed alone of snakeroot and Peruvian bark, the preparation sent to the plaintiff contained also the poisonous drug cantharides, which had been recently ground in the same mill, the taking of which caused him great pain, suffering and sickness, if it has not permanently injured his health. The instructions asked for by the defendants were properly refused."

The judgment of the Circuit Court was affirmed.

The two cases we have given—that of Thomas and wife against Winchester, and that of Fleet & Semple against Hollenkemp—settle the law as applied to chemists and druggists, when they undertake to compound or sell those medicines, where a mistake or a little carelessness may endanger life and health.

In New York City, the business of the apothecary is regulated by statute, as follows: The 35th, 36th and 37th sections of the General Regulations concerning the Practice of Physic and Surgery is, "That no person shall be hereafter allowed to commence or practice, in the city of New York, the business of an apothecary, or that of preparing and dispensing medicine, or of preparing or putting up physician's prescriptions, without having previously

obtained the diploma of the College of Pharmacy, of the city of New York, or unless furnished with a diploma from some other regularly-constituted college of pharmacy or medicine, or shall have passed an examination of the censors of the medical society of one of the counties of this State, and have been furnished by such censors with a certificate of his qualifications for the business of an apothecary, which diploma or certificate he shall produce to the Secretary of the said College of Pharmacy, to be by him registered, without charge.

Sec. 36. Any person offending against the provisions of this law shall be subject to a penalty of fifty-one dollars for each and every offense, which may be recovered, with costs, in the name of the people of the State of New York, in any civil court of record; and the said fines, when collected, after deducting such reasonable counsel fees as the court shall allow, shall be paid by the District Attorney to the Treasurer of the New York City Dispensatory, for the use of said Dispensatory.

Sec. 37. This law shall not apply to persons who now carry on said business, nor the preparation and dispensing of medicines by licensed physicians."

It is a misdemeanor, in the State of New York, for an apothecary, druggist or other person, who shall sell and deliver any arsenic, corrosive sublimate, prussic acid, or any other substance or liquid usually denominated poisonous, without having the word "poison" written or printed upon a label attached to the phial, box or parcel, in which the same is so sold; or who should sell and deliver any tartar emetic, without having the true name thereof written or printed upon a label attached to the phial, box or parcel containing the same, and shall be punished by a fine not exceeding one hundred dollars.

There is no business requiring more careful and constant watchfulness than that of the druggist. He can not, therefore, be too systematic and regular in carrying it on. Upon him the physician depends for the preparation of his prescriptions, and consequently, without his careful co-operation, not only failure to cure the disease, but actual injury from the medicine itself, may be the result.

TRADE MARKS—NAME OF A COMPOUND.

DAVIS *v.* KENDALL; 2 Durfee's (R. I.) Rep. 566.

This was an action against the defendant for pirating the plaintiff's trade mark. It appeared that the plaintiff was the original inventor of a compound sold by him, by the name of "Pain-killer;" that he had been the first to apply this word to such a compound, and that after said compound had become extensively and favorably known, the defendant manufactured and sold a imilar compound, by the name of "J. A. Perry's Vegetable Pain-killer." The defendant's medicine was put in bottles of similar size with those of the plaintiff, though of somewhat different shape. The plaintiff's label was a paper pasted on the body of the bottle, on the upper part of which was the word "Pain-killer," printed in a scroll, below which were the words "Manufactured by Perry Davis," and below this an engraving, intended to represent the plaintiff, surrounded by an oval circle bounded on either side by a simple wreath, and having in its margin the words, "The original inventor, No. 74 High st., Providence." Below the circle, in small type, were the words, "Copyright secured," and the price of the bottle, and at the bottom of the label the words, "Destroy this as soon as the bottle is empty. This will prevent fraud." The defendant's label was similarly affixed to the bottle; at the upper part were the words, "J. A. Perry's Vegetable Pain-killer;" underneath which was represented the bust of a man, and beneath this the words, "Manufactured in Providence, R. I. Price 80 cents. Copyright secured." The devices on the plaintiff's labels were on a light ground; those upon the defendant's upon a dark ground. The case was tried to the court upon an agreed statement of facts.

GREENE, Ch. J.—The plaintiff has no patent and no exclusive right to the compound called "Pain-killer." He invented the compound and gave it the name of "Pain-killer," and this seems to have been the first application of that term to a medical compound. The plaintiff, though not entitled to the compound, is

entitled to his trade mark, and the law recognizes and will protect this right.

Trade marks may be, first, the name of the maker; second, symbolical; third, the name of the compound. Of this last kind is the trade mark of the plaintiff, "*Pain-killer*."

All are entitled to make and vend this compound, and to vend it as a similar article to that made and sold by the plaintiff; but no one but the plaintiff has a right to sell it as a medicine manufactured by the plaintiff. The adoption of the same label as the plaintiff's will, of course, be actionable; and so the adoption of a label so like the plaintiff's as to mislead the public, would be actionable. If the difference be merely colorable, it will not avail the defendant. But if the defendant state in his label, that the article which he sells was made by himself, although he calls it by the same name as the plaintiff, he will not be liable; because he has a right to make and vend the compound, if he vends it as his own, and not as made by the plaintiff.[1] If the defendant, without fraud, use the trade mark of the plaintiff, he is still liable. If the right be violated, it matters not whether it be by fraud or by mistake.[2]

The whole question in this case is, whether the defendant's label is liable to deceive the public, and to lead them to suppose they are purchasing an article manufactured by the plaintiff, instead of the defendant. The agreed statement of facts does not find that the defendant's label has deceived any one, and I do not think it will do so, but my associates think otherwise, and judgment must, therefore, be returned for the plaintiff.

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[1] Canham *v.* Jones, 2 Vessey & Beames, 218.

[2] Millington *v.* Fox, 3 Mylne & Craig, 339.

CHAPTER XIII.

CRIMINAL MALPRACTICE—ENGLISH ADJUDICATED CASES.

Willful or Criminal Malpractice depends upon the *intent*, or upon rashness, or want of *due circumspection*. Under these cirstances, the law will imply criminal intent.

There is, perhaps, no subject connected with criminal jurisprudence, in which cases of so great difficulty have arisen in regard to the question of malice, as those that have occurred under the head of Criminal Malpractice by surgeons. It arises from the peculiar circumstances surrounding the whole practice of medicine, to which we have heretofore referred.

Where many questions and a multitude of elements enter into judicial decisions, there have always been a proportional contradiction and fluctuation in such decisions. The law books are full of facts that establish the truth, that a settlement of a principle, under these circumstances, is only arrived at after long years of conflicting rulings.

None of the authorities pretend to go further back than to the fifteenth century. Beyond this time, all is confusion in the Common law on the subject of Malpractice; and in the Civil law there is nothing relative to it more definite.

One of the oldest, if not the oldest decision, relating to Malpractice, is by the distinguished Sir Matthew Hale, who lived at the time of Charles I. He thus lays down the law of his time, relating to Criminal Malpractice, which opinion is quoted as authority in all succeeding decisions on the subject: "If a physician gives a person a potion without any intent of doing him

any bodily harm, but with intent to cure or prevent a disease, but, contrary to the expectation of the physician, it kills him, this is no homicide, and the like of a surgeon; and I hold their opinion to be erroneous that think if it be no licensed surg on or physician that occasions the mischance, then it is felony, for that he be not licensed according to the statutes. They are subject to the penalties in the statutes, but God forbid that any mischance of this kind should make any person not licensed guilty of murder or manslaughter."[1]

Lord Hale referred, without doubt, to Lord Coke, who held, or *seemed* to, that if the operator or practitioner was unlicensed, he would be liable where a licensed one would not be. Coke says: "If one that is in the mystery of a physician, take a man to cure, and give him such physic as within three days he die thereof, without any felonious intent, and against his will, it is no homicide, but Britton saith, that if one that is not of the mystery of a physician or chirurgeon take upon him the cure of a man, and he dieth of the potion or medicine, this is, saith he, covert felony."[2]

Though this doctrine was thus put forth by Lord Coke, yet it is said, by good authority, that there never had then been, nor has there been since, any decision of the kind attributed to Britton.[3]

Blackstone, following Hale, lays down the law as it existed in his time, to be, "If a physician or surgeon gives his patient a potion or plaster to cure him, which, contrary to his expectation, kills him, this is neither murder or manslaughter, but a misadventure, and he should not be punished criminally, however liable he might formerly have been to a civil action for neglect or ignorance; but it hath been holden, that if it be not a regular physician or surgeon who administered the medicine or performs the operation, it is manslaughter at the least; yet Sir Matthew

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[1] 1 Hale P. C. 429.
[2] 4 Inst. 251.
[3] 3 C. & P. 629, [Hullock, B.]

Hale very justly questions the law of this determination. In order, also, to make the killing murder, it is requisite that the party die within a year and a day after the stroke received, or cause of death administered, in the computation of which the whole day upon which the hurt was done is to be computed the first."[1]

Thus, these high authorities seem to agree that the want of a license, or medical degree, does not enhance the grade of offense if there was an honest desire to cure the patient.

On the contrary, in the case of Rex *v.* Simpson, the prisoner being indicted for manslaughter, it appeared that the deceased, a sailor, had been discharged from the Liverpool Infirmary as cured, after undergoing salivation, and that he was recommended by another patient to go to the prisoner for an emetic, "to get the mercury out of his bones." The prisoner was an old woman, who resided at Liverpool, and occasionally dealt in medicine. She gave the deceased a dose of the solution of *corrosive sublimate*, which caused his death. The woman said she had received the mixture from a person who came from Ireland, and had gone back again. Mr. Justice Bayley said, in that case, "I take it to be quite clear, that if a person, not of medical education, in a case where medical aid could be obtained, undertakes to administer medicine, which may have a dangerous effect, and thereby causes death, such person is guilty of manslaughter. He may have no evil intention, and may have a good one, but he has no right to hazard the consequences, in a case where medical assistance may be obtained. If he does, it is at his peril. It is immaterial whether the person administering the medicine prepares it himself, or gets it of another."[2]

This reasoning is correct, and should be deemed conclusive. Where good, intelligent medical or surgical assistance can be obtained, an empiric or ignorant person who attempts to use the

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[1] 4 Black. Com. 197.

[2] 4 C. & P. 398, note.

potent agents of the *Materia Medica* thus recklessly on human life, should be held to a strict accountability to our criminal laws. But the weight of authority is, perhaps, with Sir M. Hale and Sir William Blackstone, on the principle, that all regular and irregular practitioners are to be placed on about the same footing as to criminal liability, where no statute intervenes. This is the doctrine upon which the case of Van Butchell was decided, before Baron Hullock, Mr. Justice Littledale and Mr. Sargeant Arabin, tried in 1829, at the Old Bailey Sessions.

REX *v.* VAN BUTCHELL; 7 B. & C. 493.

This is a leading case, and worthy of study.

The indictment charged the death to be by "the thrusting of a round piece of ivory into and up the fundament, and against the rectum of the deceased, William Archer, thereby making one perforation, laceration and wound of the length," etc., "in and through the said rectum of the said Archer."

Adolphus, for the prosecution, stated that the deceased had labored under a disease of the rectum, respecting which he went to Mr. Van Butchell, on the 10th of May, 1829, when Mr. Van Butchell passed an instrument into his body, giving him pain, and that on the deceased returning home he took to his bed, from which he never rose, having died on the 17th of May. He then took the ground that the defendant was guilty of manslaughter, and read as authority an extract from Blackstone's Commentaries, and was proceeding to state what Coke had said in his Institutes, which extract we have already quoted, that if one who is not a regular surgeon take upon him to cure a man, and the patient die, it is felony.

HULLOCK, B., said: "It is said in Lord Coke's Institutes, undoubtedly, but there has never been any decision of the kind."

For the defense, it was said: "The gentleman now standing at the bar is, as I happen to know, the son of a person of great experience, and he has himself had much practice for a great many years, which I think you shall take as raising the presump-

tion that he has had a regular education; indeed, I have been told that Mr. Van Butchell is a regularly-educated surgeon. Whether he is a member of the College of Surgeons I know not; and I believe you will be told by the court that that is not essential; and I think you will also be told by the court that we must not scrutinize too nicely as to how the operation was performed, if it was not performed with such gross ignorance as to show a wanton carelessness of human life.

It was then proved by Lloyd that he opened the body of the deceased after death, and that he found a portion of the illeum adherent to the rectum, and that on separating this adhesion he discovered a small hole perforated through the rectum. Mr. Lloyd was cross-examined, with a view of showing that those appearances might have been the result of natural causes, and he stated that operations would sometimes fail, notwithstanding they might be most skillfully performed; and he added, that he himself had operated in extracting an encysted tumor from the breast of a woman, at a time when she was pregnant, and who soon after died; and that he and many other surgeons thought that correct practice, though he admitted the propriety of the practice was doubted by others.

HULLOCK, B., inquired of *Adolphus* if he thought he could carry the case further?

Adolphus said he did not think that he could.

HULLOCK, B.—I am free to confess that this does not even approach to a case of manslaughter. It would be dreadful, if every time an operation was performed, an individual was liable to have his practice questioned.

Broderick, for the defense—I am prepared to show that Van Butchell has a regular medical education.

HULLOCK, B.—*I do not think that that is material to the case.*

Broderick.—I can call a great number of patients whose cases have been successfully treated by Mr. Van Butchell.

HULLOCK, in summing up, said: "This is an indictment for manslaughter, and I am really afraid to let the case go, lest an

idea should be entertained that a man's practice may be questioned whenever an operation fails. In this case there is no evidence of the mode in which the operation was performed; and even assuming, for the moment, that it caused the death of the deceased, I am not aware of any law which says that this party can be found guilty of manslaughter. It is my opinion that it makes no difference whether the party is a regular or an irregular surgeon; indeed, in remote parts of the country, many persons would be left to die, if irregular surgeons were not allowed to practice. There is no doubt that there may be cases where both regular and irregular surgeons might be liable to an indictment, as there might be cases where, from the manner of the operation, even malice might be inferred. All that the law books have said has been read to you; but they do not state any decision, and their silence in that respect goes to show what the uniform opinion of lawyers has been upon this subject. As to what is said by Lord Coke, he merely details an authority—a very old one—without expressing either approbation or disapprobation. However, we find that Lord Hale has laid down what is the law on the subject: that is copied by Mr. Justice Blackstone, and no law book goes any further. It may be that a person not qualified legally to practice as a surgeon, may be liable to penalties; but surely he can not be liable to an indictment for felony.

It is quite clear you may recover damages against a medical man for want of skill; but, as Lord Hale says, "God forbid that any mischance of this kind should make a person guilty of murder or manslaughter." Such is the opinion of one of the greatest judges that ever adorned the bench of this country; and his proposition amounts to this, that if a person *bona fide* and honestly exercising his best skill to cure a patient, performs an operation which causes the patient's death, he is not guilty of manslaughter. In the present case no evidence has been given respecting the operation itself. It might have been performed with the most proper instrument, in the most proper manner, and

yet might have failed. Mr. Lloyd has himself told us that he performed an operation, the propriety of which seems to have been a sort of *vexata quæstio* among the medical profession; but still it would be most dangerous for it to get abroad, that if an operation, performed either by licensed or unlicensed surgeons, should fail, that the surgeon would be liable to a prosecution for manslaughter. I think, in a point of law, this prosecution can not be sustained; and I feel bound to say, that no imputation, whatever, ought to be cast upon the gentleman who is now at the bar, in consequence of any thing that has occurred.

Lord Ellenborough lays down the same doctrine in the Williamson case.

REX *v.* WILLIAMSON; 7 B. & C. 497.

In this case the prisoner was indicted for the murder of Ann Delacroix, at the parish of St. James, Westminster. He was also charged with manslaughter by the coroner's inquisition.

The physician thus charged was about seventy-five years of age. He was not a regularly-educated accoucheur, but was a person who had been in the habit of acting in that capacity among the lower classes of people.

One of the witnesses testified, (the nurse who waited upon Mrs. Delacroix,) that Mrs. D. had been delivered by the prisoner of a male child on Friday, the 17th of September, and that on the Sunday following an unusual appearance took place, which the medical witnesses stated to be a *prolapsus uteri*. This the prisoner mistook for a remaining part of the *placenta*, which had not been brought away at the time of the delivery. He attempted to bring away the *prolapsed uterus* by force, and in so doing he lacerated the uterus, and tore asunder the mesenteric artery. This, of course, caused the death of the patient. Had he not gone quite so far, and only strained and slightly ruptured the parts connected with the uterus, the case would have been one of *living death*. This condition, thus brought on, is not uncommon, and the poor woman lingers out a miserable and painful existence. The medical evidence went to establish the fact that there

must have been a great want of anatomical knowledge in the prisoner.

On the other hand, fourteen women appeared as witnesses for the defense, all of whom had been delivered by the prisoner at different times: but six only were examined; and they spoke of the kindness and attention that the prisoner had displayed, and also of his skill, *so far as they could judge.*

Lord Ellenborough, Ch. J., in summing up, said to the jury: "There has not been a particle of evidence adduced which goes to convict the prisoner of the crime of murder; but still it is for you to say whether the evidence goes so far as to make out a case of manslaughter. To substantiate that charge, the prisoner must have been guilty of criminal misconduct, either arising from the grossest ignorance or the most criminal inattention. One or other of these is necessary to make him guilty of that criminal negligence and misconduct which is essential to make out a case of manslaughter. It does not appear in this case that there was any want of attention on his part, and from the evidence of the witnesses on his behalf, it appears that he had delivered many women at different times,—*and from this he must have had some degree of skill.* It would seem that, having placed himself in a dangerous situation, he became shocked and confused. I think that he could not possibly have committed such mistake in the exercise of his unclouded faculties; and I own that it appears to me that if you find the prisoner guilty of manslaughter, it will tend to encompass a most important and anxious profession with such dangers as would deter reflecting men from entering into it."

Verdict—not guilty!

This important case, thus analyzed by the distinguised judge who presided at the trial, shows how difficult it always has been to convict a medical man of murder or manslaughter when he has caused death in the course of his profession. This, perhaps, is right; that the innocent may not unjustly suffer from an unhealthy public or judicial influence. Yet there ought to be

no hesitation in punishing an outrageous transaction like the one detailed in the above case, with the heaviest penalties of the law.[1] The proper protection of the public requires it—the reputation of the medical profession calls for and demands it as a vindication of its science, and of legitimate, intelligent practice.

While the caution of Lord Ellenborough is commendable, yet in this case he has been carried too far. Nor is his reasoning correct. It is no more an inference of "some degree of skill" in Williamson, because he had delivered some women successfully before, than the fact that a woman who has delivered herself of ten or a dozen children, which is often the case, is evidence that she possesses some knowledge of the uterine system. Nine-tenths, perhaps, of the obstetric cases require no medical aid whatever; when it is required, however, it is so immediate and necessary, that it is unsafe to be without this aid at hand at any time. When needed at all, the best skill is called for. Nor is it a very good excuse, or one that should have but little weight, that "he became shocked and confused," and in that state of mind killed the woman.

The truth undoubtedly is, that this man undertook to discharge the delicate and important duties of an accoucheur without any anatomical or obstetric skill whatever; and although he had passed through cases successfully, when the moment and the case occurred that required skill and caution, he had them not; and ignorantly and wickedly caused the death of one who had intrusted her life to his care, which obligation he had recklessly assumed. With any proper degree of anatomical skill he could not have failed to distinguish a *uterus* from a *placenta*. If he did not have the necessary knowledge to determine between these two parts, then he was certainly grossly ignorant. If he did know the difference and the danger, and yet used so much force, violence and tension, as to tear down the uterus, rupturing arteries and injuring the parts generally, then he was guilty of

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[1] 2 K. & S., 662, p, 19; C. & K, 232-3; Id. 368-711.

gross carelessness, presumption and inattention, and he should in either case suffer punishment, that others as well as himself might be deterred from repeating the offence, in like cases. It would not have a tendency, as Lord Ellenborough says, to "deter reflecting men from entering into" the medical profession, by punishing those criminally ignorant when they so richly deserve it; but, on the contrary, it would induce high-minded men to enter it, if they saw science and skill protected, and ignorance and carelessness punished by the courts. Such a course would encourage intelligent physicians to remain in the profession who are now leaving it.

This case illustrates how ignorant a distinguished Lord Chief-Justice of England may be as to the science of medicine. He supposes that because an ignorant old man had the temerity to act the part of an accoucheur among a class of low, ignorant women, that therefore he must necessarily have some skill. A most absurd proposition. And that if the quacks were punished, well educated men would not enter the profession; while the truth undoubtedly is, as already stated, that many honorable men hesitate to enter the profession, and others leave it, because these pretenders who disgrace its name and practice—destroying the lives of their victims wantonly—are not held to as strict and rigid an accountability as the circumstances of the case will warrant. It would tend greatly to encourage the honorable members of the medical profession, if, when a case of Malpractice is so completely established as in the Williamson case, such punishment as would be proper under other similar circumstances should be measured out to the offender.

The worthy part of the profession ask for the violation of no well-settled principle of law in their behalf. That this verdict violated law there can be no doubt.[1]

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[1] 19 John, 381; 4 Denio, 464; 2 Bl., 892-3-4, 899-900; Broom's Leg. Max., 168-9, 1st ed.; 5 Mould & Sel., 198: 41 Eng. Com. Law R. 425; 19 Wend. 345-6; 4 Denio, 317; 2 Wend. 385; 3 Metc. 469.

CHAPTER XIV.

CRIMINAL MALPRACTICE—ENGLISH ADJUDICATED CASES, CONTINUED.

REX *v.* JOHN ST. JOHN LONG, 6 Bingham, 440.

THE case of St. John Long, illustrates what degree of ignorance, negligence, and hardihood, can at times pass the ordeal of an English court and not meet with condemnation and punishment.

The indictment in this case charged that St. John Long, on, etc., at, etc., did make an assault, and with a certain inflammatory and dangerous liquid, secretly prepared, mixed and made by him, on the back of her, the said C. C., did rub, wash and sponge, and caused and procured to be rubbed, washed and sponged, he, the said J. St. J. Long, knowing the liquid so prepared, mixed, and made, to be inflammatory and dangerous; and that he did by the said rubbing, etc., cause upon the back of the said C. C., one mortal inflammation and wound of the length, etc., and did also, by means of such rubbing, etc., cause and procure the said C. C., to become mortally sick, etc.; the indictment also stated that the deceased languished from the 3d of August to the 17th of the same month, 1830, and then died. There were other counts, all in nearly the same form; in some of which the death was stated to be from the inflammation and wound, and in the others from the sickness. There was no count which expressly imputed either negligence, carelessness, ignorance or want of skill to Long, which, perhaps, there should have been, nor was there any count charging the inhaling to have caused the death of the deceased.

For the prosecution it was said, that by gross misconduct, Long had produced an inflammation which had caused the death

of Miss Cashin. The act was done by a servant of Mr. Long, by his directions; but, as the servant was only an innocent agent, Mr. Long was to be considered as the principal, exactly the same as if he had done it himself. Nothing was charged to Long, on the ground that he was not a regularly educated physician. The prosecutor in the case asked for judgment against Long, on the broad principle that he was no more responsible than the first medical practitioner in the kingdom, but still, if any man by an unlawful act should cause death, it was manslaughter;—this was distinctly laid down by Mr. Justice Foster,[1] who said: "If an action, unlawful in itself, be done deliberately, or with intention of mischief, or great bodily harm to particulars, or of mischief indiscriminately, fall where it may, and death ensues, against or beside the original intention of the party, it will be murder; but if such mischievous intention does not appear, this is matter-of-fact, and to be collected from circumstances, and if the act was done heedlessly and incautiously, it will be manslaughter,—nor accidental death, because the act upon which the death ensued was unlawful." There was also another proposition of law, which was, that if, in the prosecution of any lawful act, any thing was done which was imprudent, irregular or improper, and death ensues, it would be manslaughter. Justice Foster,[2] who said: "It is not sufficient that the act upon which death ensueth be lawful or innocent, it must be done in a proper manner, and with due caution to prevent mischief." The most common case of this kind was that of a coachman driving fast in the streets. He had no bad intent, but the act being done with irregularity, he would be guilty of manslaughter if death ensued.

It was said, to apply this principle to medical men, it would stand thus: they, whatever their skill, must use due caution; but there was no doubt, considerable latitude must be allowed them. In modern times poisons were exhibited as medicines in

[1] Cr. Laws, 261. [2] Cr. Laws, 262.

certain cases; but if in the hurry of the moment, the medical man were to give fifty grains instead of one, he would be guilty of manslaughter if death ensued. So, a surgeon had a right to amputate a limb, but if in the hurry to go elsewhere, he left the arteries imperfectly secured, and death ensued, he would also be guilty of manslaughter. It might be said, that the consent of Miss Cashin was given to all that was done; but still, no one could permit another to do that which was criminal. Persons could not give a consent to put their own lives in danger.

It appeared, from the evidence of a witness, that two of the family of Mrs. Cashin had died of consumption; but that Miss Cashin, who was twenty-four years of age, had enjoyed good health; and that Long told him (the witness,) that he (L.,) had informed a young lady that unless Miss C. put herself under his care, she would die of consumption in two months; and that, on this being communicated to Mrs. Cashin, she placed her daughter under L.'s course of treatment, hoping to prevent her having consumption. The witness also stated that L. told him that he rubbed a mixture on different parts of the bodies of his patients, and that it had been applied to Miss Cashin. It was proved by another witness for the prosecution, (Mrs. Roddis,) that she went with Miss Cashin to L.'s on the 13th of August, respecting a wound on her back, and that Miss Cashin then inhaled, and that, on the next day, Long examined Miss Cashin's back, and said it was in a *beautiful state*, and that he would give one hundred guineas if he could produce a similar wound on the person of some of his patients. Mrs. Roddis stated that she directed Long's attention to the part of the wound which was of a darker appearance, and that he stated that this proceeded from inhaling, and that unless those consequences were produced, he could not expect a beneficial result. The wound, at this time, was about five or six inches square. The witness further stated, that Miss Cashin was suffering much from sickness, and she mentioned this to Mr. Long, who said that it was of no consequence, but, on the contrary, a benefit; and that those symptoms, combined with the

wound, were a proof that his system was taking due effect; and that, on Sunday, the 15th, Miss Cashin having got worse, Mr. Long said that, in two or three days, she would be in better health than she had ever been in her life, and spoke very confidently that the result of his system would be to prolong her life, and that no person could be doing better than Miss Cashin.

At this interview Mrs. Roddis showed Mr. Long the wound on Miss Cashin's back, which had extended. She also stated that Mr. Long, on Sunday, the 15th, was desired to do something to stop the sickness of Miss Cashin, but that he said he had a remedy in his pocket, which he would not apply, as he knew that sickness had been beneficial; and he also stated, on that day, and on Monday, the 16th, that Miss Cashin was doing uncommonly well. She died on Tuesday, the 17th.

It was also proved by Mr. Brodie, the celebrated surgeon, that he saw Miss Cashin on Monday before she died, and that her back was extensively inflamed, as large as a plate; and that in the center was a spot as large as the palm of his hand, black and dead, which was in a sloughing or mortified state. Mr. Brodie stated that he did not consider Miss Cashin to be in any immediate danger, and that he thought that some very powerfully-stimulating liniment had been applied to her back. In his cross-examination he said that it was very common to produce a counter-irritation, and that the things used to produce that produced very different effects upon different constitutions; but in re-examination, he stated that, applying a lotion of a strength capable of causing the appearances he saw, to a person of the age and constitution of the deceased, if in perfect health, was likely to damage the constitution, and produce disease and danger. Mr. Brodie also stated that the appearances on Miss Cashin's back were quite sufficient to account for her death. Several other medical men, who had examined the body of the deceased, stated, that on the most careful examination, they could not discover any latent disease, or seeds of disease. A servant of Mr. Long's, named Ann Dyke, stated that on the 3d of August, she, by the

direction of Mr. Long, rubbed Miss Cashin's back with a liquid, but that she did not know what the liquid was. In her cross-examination she stated that Mr. Long had a great many patients, many of them persons of rank, and that she rubbed Miss Cashin's back with the same liquid that was used for the other patients.

On the part of the defense, it was asked if a greater effect was produced on Miss Cashin than on other persons? The question, though objected to on the part of the prosecution, on the ground that it was not in issue whether the defendant had done good or not in other cases, was permitted by Justice PARKE and Mr. Baron GARROW, holding that the question might be put, and that the witness might be asked the names of the persons who attended at the same time, and were treated in the same manner as Miss Cashin. The witness stated that the Marchioness of Ormond and Lady Harriet Butler were at Mr. Long's at the same time that Miss Cashin was there, and that the same lotion was applied to them, and also to Mrs. Ottley and many others.

The defense submitted that, in point of law, that this was nothing like a case of manslaughter; and they cited 1 Hale's P. C. 429; 4 Bl. Com. b. 4, c. 14, and the Van Butchell case, and argued that it was quite clear that Mr. Long intended to prevent or cure the disease.

Mr. Justice PARKE said: "I am in this difficulty. I have an opinion, and my learned brother differs from me. I must, therefore, let the case go to the jury."

Mr. Baron GARROW said: "In Rex *v.* Van Butchell, the learned judge had very good ground to stop the case, as there was no evidence as to what had been done. I make no distinction between the case of a person who consults the most eminent physician, and the case of those whose necessities or folly may carry them into any other quarter. It matters not whether the individual consulted be the President of the College of Physicians, the President of the College of Surgeons, or the humblest bone-setter of the village; but be it the one or the other, he ought to bring into the case ordinary care, skill and diligence. Why is it

that we convict in cases of death by driving carriages? Because the parties are bound to have care, skill and caution. I am of opinion that if a person, who has ever so much or so little skill, sets my leg, and does it as well as he can, and does it badly, is excused; but suppose the person comes drunk, and gives me a tumbler-full of laudanum, and sends me into the other world, is it not manslaughter? And why is that? Because I have a right to have reasonable care and caution.

It was said there was a case on the Northern Circuit, where a man, who was drunk, went and delivered a woman, who, by his mismanagement, died. He was sentenced to six months' imprisonment."

For the defense, twenty witnesses were called, including the Marchioness of Ormond and Mrs. Ottley, who stated that they had been patients of Mr. Long, and that they were satisfied with his skill and diligence. One of the witnesses stated that he should never cease to pray for Mr. Long as long as he lived. Another, a lady, said that she could never be sufficiently thankful to him for what he had done for her family; and another was a surgeon, who had lived in Jamaica for thirty-six years, and he expressed himself perfectly satisfied with Mr. Long's treatment and conduct.

Mr. Justice PARKE, in summing up, said: "The learned counsel for the prosecution truly stated, in the out-set, that whether the party be licensed or unlicensed is of no consequence, except in this respect, that he may be subject to pecuniary penalties for acting contrary to charters or acts of Parliament; but it can not affect him here. For this I have the authority of that great and eminent person, Lord Chief-Justice Hale, who has expressly said, that though physicians and surgeons, if they are not licensed, may be subject to penalties, yet they are not answerable criminally on that account. His phrase is, 'God forbid that any mischance of this kind should make a person guilty of murder or manslaughter;' and, therefore, licensed or unlicensed, certainly does not signify; I agree with my learned brother that what is called

mala praxis in a medical person, is a misdemeanor; but that depends upon whether the practice he has used is so bad that every body will see that it is *mala praxis*. The case at Lancaster differs from this case. I have communicated with Lord Chief-Justice Tindal, who tried that case, and he informed me that the man was a blacksmith, and was drunk, and was so completely ignorant of the proper steps, that he totally neglected what was absolutely necessary after the birth of the child. That, certainly was one of the most outrageous cases that ever came into a court of justice. I would rather say, with my Lord Ellenborough in the case of Rex *v.* Williamson, 'That a medical man is not to be charged with manslaughter, unless he has been guilty of criminal misconduct, arising either from the grossest ignorance or the most criminal inattention.' And this is important here; for though he be not licensed, yet experience may teach a man sufficient; and the question for you will, by and by, be, whether the experience this individual acquired does not negative the supposition of any gross ignorance or criminal inattention. The case quoted from the Institutes of Lord Coke, who lived upward of two hundred years ago, occurred at a time when there were very few cases of the kind, and was deemed to be a case of manslaughter. But I do not derogate from his high and illustrious character, when, as far as criminal law is concerned, I set against it the authority of my Lord Chief-Justice Hale, on whom, when authority is quoted, reliance is always placed. He says: 'If a physician gives a person a potion, without any intention of doing him any bodily hurt, but with intent to cure him, or prevent a disease, and contrary to the expectation of the physician, it kills him, this is no homicide: and the like of a chirurgeon;' and he quotes the Year-Book, 3 Ed. 3; and he goes on to say, 'And I hold their opinion to be erroneous who think if he be no licensed chirurgeon or physician that occasioned this mischance, that then it is felony, for physic and salves were before licensed physicians and chirurgeons;' and he proceeds further and says: 'These opinions may serve to caution ignorant people not to busy in this kind with tampering with

physic, but are no safe rules for judges or jury to go by.' I say the same—that the public weal is deeply interested in preventing ignorant persons from tampering with these subjects. It is true, his next reason, about the want of surgeons in the country, does not apply here; because, in London, all persons can obtain the assistance of the best men, however poor they are. The question is, whether there was gross ignorance in this gentleman, or scandalous inattention in the treatment of this lady. The opinion of Lord Chief-Justice Hale is recorded and adopted in Sir Edward East's Pleas of the Crown, and in Blackstone's Commentaries. I come now to the case of Van Butchell, decided here only twelve months ago by Mr. Baron Hullock, of whom it may be said, that a sounder lawyer or a stronger-headed man was never known in this profession. I quote this case rather to show you what that learned person's strong opinion was upon the general question, on the danger, not of punishing the man found guilty of gross negligence, but whether his practice can be questioned whenever an operation happens to fail. He says: 'It is my opinion that it makes no difference whether the party be a regular or irregular surgeon;' and also, 'There is no doubt that there may be cases where both regular and irregular surgeons might be liable to an indictment, as there might be cases where, from the manner of the operation, even malice might be inferred.' I agree with him, that there may be such cases as those he has first mentioned, and you will have to decide whether this is one of them or not. I wish also to state to you what Lord Ellenborough said in the case of Rex *v.* Williamson, which was the case of a man who acted as a man-midwife. Lord Ellenborough there says, that, from the evidence, it appeared that the prisoner had delivered many women, at different times; and from this, he must have had some degree of skill. He goes along with me in thinking that skill may be acquired by practice. That is my opinion here, and there are twenty-nine witnesses, all speaking to the prisoner's skill in their cases. There is clear evidence that the prisoner did the act that shortened Miss Cashin's life. But that

does not prove the case, unless you think there was gross ignorance, or inattention to human life to be inferred from it. It is evident he had some information. Whether he drew improper conclusions from it is not for you or me to say. It seems from Mr. Sweetman's evidence that the disorder had been in the family—that a son was dead, and a daughter was likely to die.

The prisoner always said that his remedy would cure consumption; and if the disease had not been in the family, they would not have sent to him at all. The prisoner's counsel could not by law, ask the defendant's witnesses any questions as to their respective disorders, and the mode of cure, as my brother and I were of opinion that it was not evidence. All that was evidence, was, that he had displayed so much skill in other cases as to show that he was not that grossly-ignorant or inattentive person who could be guilty of manslaughter, according to Lord Ellenborough's opinion in the case before mentioned. The refusal of the prisoner to apply the medicine, in order to stop the sickness, although he had it with him, would, in my opinion, if wickedly done, amount to murder; but he mentioned a case in which sickness had been beneficial. Undoubtedly, the result proves a very erroneous opinion on his part; and it seems singular that the restlessness and other circumstances did not awaken apprehension and call for further measures; but the question again recurs, whether this was an erroneous judgment of a person who was of general competency, though he unfortunately failed in this particular instance? It appears that he said, on examining the wound on Miss Cashin's back, that he would give a hundred guineas if he could produce a similar wound on some of his patients. This seems to show his confidence in his proceedings; and there is this observation to be made of him throughout, that he seems to have been living in a fashionable part of the metropolis, and attended by right honorable persons, and it would be against his interest to act ignorantly and carelessly.

It appears, with respect to Miss Cashin, that he did not go to seek her out, and this will be for you to take into your consider-

ation. With respect to the application of the mixture, if he commanded the woman to use it, it is the same as if he used it himself. Perhaps, from the evidence, you will think that the act caused the death; but still the question recurs as to whether it was done either from gross ignorance or criminal inattention.

No one doubts Mr. Brodie's skill; but that is not quite the question. It is not whether the act done is the thing that a person of Mr. Brodie's great skill would do, but whether it shows such total and gross ignorance in the person who did it, as must necessarily produce such a result. On the one hand, we must be careful and most anxious to prevent people from tampering with physic, so as to trifle with the life of man; and, on the other hand, we must take care not to charge criminally on a person who is of general skill, because he has been unfortunate in a particular case. It is God that gives health: man only administers medicine; and the medicine that the most skillful may administer may not be productive of the expected effect; but it would be a dreadful thing if a man were to be called in question criminally whenever he happened to miscarry in his practice. These are things for your consideration, when you are considering whether a man is acting wickedly; for I call it acting wickedly when a man is grossly ignorant, and yet affects to cure people, or when he is grossly inattentive to their safety. With respect to the evidence on the part of the prisoner, all the witnesses that he has called have spoken of him as being perfectly satisfied with his skill, attention and behaviour, in every respect. It is observable of several of them, that, after their families have been attended, they put themselves under his care, so satisfied were they with his conduct. One of them says that he shall pray for him as long as he lives; and another, (a lady,) says she can never sufficiently thank him for what he has done for her family. It is also to be remarked, that one of these witnesses is himself a surgeon, who lived for thirty-six years in a hot climate, and he expresses himself perfectly satisfied. You will take the whole case into your consideration, and if you think there was gross igno-

rance or scandalous inattention, in the conduct of the prisoner, then you will find him guilty; and if you do not think so, then your verdict will be otherwise."

This certainly was a most liberal charge, so far as it concerned the prisoner.

The jury, after some deliberation, found the prisoner guilty, and he was subsequently sentenced to pay a fine of £250 to the king.

There was evidently a difference of opinion in this case between the two distinguished judges who tried it, as to the rule of law to be applied. PARKE says: "I am in this difficulty. I have an opinion, and my learned brother differs from me. I must, therefore, let it go to the jury."

In the Butchell case, Baron Hullock arrested the trial, and told the jury that "the prosecution could not be sustained, and that no imputation ought to be cast upon the prisoner at the bar;" and Lord Ellenborough, in the Williamson case, told the jury they ought not to find the prisoner guilty, although he had mistaken the uterus for the placenta, tearing it down, and thus destroying the life of the patient. This case also went to the jury under a charge every way favorable to the prisoner.

It was in evidence that the deceased was in good health until the application was made upon her person by Long. Mr. Brodie, one of the oldest and most accomplished surgeons of England, testified, that when he saw the case there was a spot on the back, as large as his hand, *black* and *dead*, mortified and sloughing. Long pronounced this a "beautiful state," and said that "he would give a hundred guineas if he could produce a similar wound on the person of some of his patients." Is not this a most startling admission that he was grossly ignorant? Mr. Brodie said, what every medical man knows, that the application of a lotion of a strength capable of causing the appearances he saw, to a person of the age and constitution of the deceased, if in perfect health, was likely to damage the constitution and produce disease and danger. Long said this effect was of "no consequence;" that the deathly sickness, "combined with the wound, were a proof that

his system was taking due effect." He also stated that he had a medicine in his pocket that would stop the sickness; but that he would not apply it because the sickness was beneficial. This assertion, that he possessed a medicine of such virtue, alone stamps Long at once, in the mind of every intelligent medical man, as an impostor. The *Materia Medica* affords no medicine, and there can be no combination of remedies, that will instantly or proximately cause a sickness of the stomach to abate, depending, as in this case, on a fatal organic disease. Long knew he had no such medicine, or he was criminally ignorant.

This case, like that of Williamson, illustrates and proves what must be acknowledged, although a painful fact, that the most illustrious judges—illustrious for their great legal knowledge—show almost an entire want of medical and anatomical knowledge. Lord Ellenborough thinks a man may mistake the uterus for the placenta—tear it out by reason of this mistake, and kill the woman, and yet not be guilty of gross ignorance! There can not be the least excuse for an error of this kind, and the man guilty of it should be, not only indicted, but visited with the heaviest penalties of the law;—and a judge ought to have knowledge enough to know it.

In this Long case, PARKE, J., thinks the fact that the girl went to the doctor and solicited his aid there, instead of being sought out by him, "should be taken into consideration" by the jury. What more powerful and effective means could the impostor, Long, have used to bring the girl within his power, than to send word to her and her mother, that unless she put herself under his care she would die of consumption in three months?

No message could have been more terrible, under the circumstance of the family being of a consumptive habit, as they supposed, than such a communication, coming from one who had, in the language of the judge, "always said that his remedy would cure consumption." The judge further says, "If the disease had not been in the family, they would not have sent for him at all." It is equally evident that if the disease had not been in

the family, this quack could not have insinuated himself, by the aid of a female friend of the family, into its bosom, by pronouncing death upon one already alarmed for fear of hereditary consumption.

REX *v.* JOHN ST. JOHN LONG, (Second case); C. & P. 423.

Within a year after the former case was tried, St. John Long is again found in court as defendant in another case of the same kind already cited. He made a great noise in London, at one time, as a consumption curer. The theory of this noted quack was, that all diseases proceeded from buttercups. Every man, woman and child eats mutton, beef or butter, or drinks milk; every cow and sheep eats buttercups with their grass; buttercups are rank and acrid weeds; *ergo, all diseases proceed from buttercups.* How beautifully simple! This theory was enough to make Mr. Long at once noted; and "the Marchioness of Ormond and Lady Harriet Butler were among his patients!"

In this case the first count in the indictment charged that the prisoner did, on the 6th of October, and at other times, cause Mrs. Lloyd to inhale certain noxious and injurious vapors, and that he, with a certain corrosive, inflammatory and dangerous liquid, secretly prepared, mixed and made by him, feloniously did rub, wash and sponge, and cause and procure to be rubbed, washed and sponged, the breast and chest of the patient, and thereby caused a sickness and ulcer that resulted in death, on the 8th of November. It charged the prisoner with manslaughter.

The second count charged only the rubbing, omitting the inhaling. The 3d, 4th, 5th, 6th, 7th and 8th counts only varied the statement of the manner in which the liquid was applied.

The 9th count contained an allegation that the prisoner applied the liquid to the chest, he "well knowing the said liquid to be inflammatory and dangerous in that behalf," and described the chest as becoming mortally inflamed, ulcerated and gangrened all over the same." The 10th count was similar, omitting the *scienter.* Plea, not guilty.

Denman, A. G., in opening the case for the prosecution, stated

that he should not offer any particular evidence as to the inhaling, as it did not appear, as far as they were able to judge, to be in any way the cause of the death, which appeared to be solely occasioned by the application of the mixture. If the facts were made out, the question would arise, whether the prisoner was guilty of manslaughter. The charge against him was not of acting with malice aforethought, but of applying himself to the treatment of a case of which he knew nothing, and of using a most dangerous liquid, with the effect of which, in the judgment of charity, he must be supposed to have been unacquainted. If, with gross ignorance of the subject, he, with the desire of gain, undertook the case, and, in consequence, death ensued, it would be clearly a homicide, by no means either justifiable or excusable. The law admitted of no doubt. If a party, grossly ignorant, undertook to deal with deadly remedies, without knowing the effect they would produce, he was answerable criminally, if they occasioned death. The question, whether the physician was regularly educated or not, did not apply. A regular medical education might furnish a defense which an uneducated person could not have; but the absence of such education certainly did not make a person guilty. The only question was, whether, in point of fact, the prisoner was ignorant of what he was about, and whether that ignorance was the cause of his patient's death. If a man, in the most extensive practice, were to take cognizance of a particular case, of which, by his treatment, he showed that he was clearly ignorant, his great practice would not be any excuse.

The witnesses called on the part of the prosecution, were Capt. Lloyd, the husband of the deceased; Mrs. Campbell, a relation, at whose house she was staying; and Mr. Campbell, Mr. Vance, Mr. Brodie and Mr. Frankum, surgeons.

From the examination-in-chief of Capt. Lloyd, the following facts appeared: The deceased, for several years, had been troubled occasionally, when she caught cold or any thing excited her, with a choking sensation in the throat, for which she had, about three years before her death, consulted a medical man, and for which

she was in the habit of applying a blister to the throat, and afterward of healing the wound with a simple dressing of spermaceti ointment. A son of the deceased was under the care of Mr. Long; and on various occasions, when the deceased attended with her son, she mentioned, in conversation with Mr. Long, the complaint in her throat; and the conversation eventually led to her putting herself under his care on the 6th of October, 1830, at which time she was in very good general health. On the 3d of October, she had applied a small blister to the throat, but the wound occasioned by it was nearly well; on the 6th, 7th, 8th, 9th and 10th, she went to Mr. Long's, and on the evening of the 10th complained to her husband of a violent burning across the chest, in consequence of which he looked at it, and found great redness across her bosom, darker in the center than at the other parts. She also complained of great chilliness, and shivered with cold, and passed a very restless and uncomfortable night. On the 11th she was very unwell all day, and complained of great thirst; the redness was more vivid, and the spot in the center darker; round the edges white and puffed up, and there was a dirty white discharge from the center. Cabbage leaves had been applied, and when they were removed they appeared slimy from the discharge. The night of the 11th was passed very uncomfortably. On the morning of the 12th, the redness on the breast and chest was, if any thing, greater, and the spot in the center more puffed up and darker; the redness was more spread round the edges, and where it stopped there were blisters in the skin, apparently from the discharge; the inner part of the arms also were red, where the discharge had run down on each side. On the 12th she was quite feverish and restless, and had no appetite; and in consequence of the symptoms, Capt. Lloyd went to Mr. Long about the middle of the day; Mr. Long asked why Mrs. Lloyd had not come to inhale, and go on with the rubbing; Capt. Lloyd replied, it was impossible, she was so very ill; that she had been constantly unwell since the night of the 10th, and was suffering a great deal of pain and sickness; Mr. Long said

he dare say it would soon go off—it was generally the case; he was told of the shivering and chilliness, and that some hot wine and water had been given to relieve her; he said hot brandy and water would have been a better thing, and to put her head under the bed-clothes. He was told that the chest and breast looked very red and very bad; he said that was generally the case in the first instance, but it would go off as she got better, and that Capt. L. need not be uneasy about it, as there was no fear of danger; Capt. L. requested him to call in the evening, and then told him where Mrs. L. was, which it appeared he did not know before; in the evening he came and saw her; in the course of the day the cabbage leaves had been removed, and a dressing of spermaceti ointment put on the chest instead; he said he was very sorry to see her so unwell—that she ought to have endeavored to get up and come to him, and he would have relieved her; she said it was impossible, she was in such pain and suffering, and with her breast open in that way it might be dangerous. He desired to look at it, and, observing the dressing, said those greasy plasters have no business there, and she ought to have continued the cabbage leaves; she said she could not bear the pain of keeping them on; he then took off his great coat, and said he would rub it out; and he turned up the cuff of his coat, as if for the purpose of doing so; she exclaimed with fright, and expressed her wonder that he would think of rubbing while her breast was in so bad a state; she asked if there was no way of keeping the leaf on without touching the breast; and he asked her what she wished. She replied, "To be healed." He said it would never heal with those greasy plasters; that was not the way in which he healed sores. He then asked for a towel, and began rubbing it on the breast, particularly in the center, where the discharge come from; he said that old linen was the best thing to heal a wound of that kind. She said her skin and flesh were very healthy, and always healed immediately with the simple dressing she had used. He said old linen was better, but she might make use of the dressing if she liked; he saw no objection, and when it skinned

over he would rub it again; she said no, she thought she would never submit to rubbing again, from what she was then suffering. He then went away. On the evening of the following day (the 13th,) he called again, but Mrs. Lloyd would not see him, and begged her husband not to let him come up; and he never saw her afterward. She died on the 8th of November, just a month and a day after she put herself under Mr. Long's care.

On the cross-examination of Capt. Lloyd, he said that his son continued to attend Mr. Long for several days after the commencement of the deceased's illness, and on one occasion was desired to tell Mr. Long that he need not come to see her, as she was better. He also added, that a person, describing himself as a medical man, and saying that he was sent by Mr. Long, applied to see Mrs. Lloyd, and was not allowed to see her. He also admitted that he had told Mr. Long that he could not pay fees for his son until after Christmas, and that Mr. Long said that would not make any difference; he might send him, and he would attend to him.

Mrs. Campbell stated that Mrs. Lloyd was in a very good state of health, except that her throat was sometimes troublesome; that she complained of a stoppage in swallowing; that on the 10th of October, when the shivering came on, the bed was warmed, and Mrs. Lloyd put into it; bottles of hot water were applied to her feet; and that, when Mr. Long went away, after having seen her, he did not give any directions as to diet, or order her any internal medicine. It also appeared from her evidence, that previous to Mrs. Lloyd's putting herself under the care of Mr. Long, she had attended three days at the inquest held on the body of Miss Cashin.

From the examination-in-chief of Mr. Campbell, the surgeon, it appeared that he was the son of Mrs. Campbell, at whose house the deceased was on a visit, and that he first saw the deceased about four o'clock in the afternoon of the 12th of Octobor, at his mother's request, at which time he found a very extensive wound, covering the whole anterior part of the chest, which, in his opinion,

might be produced by any strong acid; that the skin was destroyed, and lay in folds on the chest, entirely separated; that the cellular tissue was partly destroyed, and there was a considerable discharge generally; that the wound extended from one arm-pit to the other nearly, and from the throat down to the pit of the stomach; that the skin was off both breasts, and the center of the wound was darker, and in a higher state of inflammation than the other parts; that he removed the cabbage leaves and applied the dressing of spermaceti ointment; that he saw the deceased on the 13th, and afterward daily, several times a day, till her death; that he considered the wound very dangerous to life when he first saw it, but only continued to apply the spermaceti ointment till the 21st of October, when he called in the assistance of Mr. Vance, who continued at first to apply the same dressing, only adding to it a little calamine powder; that, on the second or third day of his attendance, Mr. Vance applied a bread-and-water poultice; that he (Campbell,) at first gave Mrs. Lloyd some saline aperient medicine; and when the center spot and the under part of the chest became gangrenous, which they did in about a week, she had bark, mineral acid and quinine. The witness added, that, in his opinion, Mrs. Lloyd died of the wound which he first saw; that, according to his judgment, it was not necessary or proper to produce such a wound to prevent any difficulty in swallowing; and that he did not know of any disease in which the production of such a wound would be necessary or proper. He further stated, that he informed Mr. Vance of the course he had pursued, and nothing which he or Mr. Vance applied could possibly increase the danger to the patient. On his cross-examination, he said that he had been in practice six or seven years; that, in the course of his practice, he had known a common blister often produce very injurious effects, which the person who prescribed it never contemplated, and that a medical man must regulate his treatment as well by the statements of the patient as by external appearances; that he did not wish for any additional assistance till gangrene commenced, though he feared

it would take place from the first; and that he stated the danger he apprehended, very soon after he was called in, to his mother and Captain Lloyd, and a sister of the deceased, but that twice they had some hopes of her eventual recovery. On his re-examination, he said, that he did not consider it a case of difficulty in the treatment; that he was present at the post-mortem examination, and that the wound did not present the appearance which he had ever seen produced by a common blister. In answer to questions from the judge, he said, that he thought rubbing on the 12th of October, when he first saw the wound, would have increased the inflammation and could not have been in any respect beneficial.

The evidence of the surgeon Vance, coincided with the other witnesses as to the appearance of the wound. He stated also that he approved of the treatment pursued by Mr. Campbell, and that he had attended Mrs. Lloyd about three years before her death, for an affection of the throat, which he at first thought a case of narrow oesophagus, but afterward he ascertained to be *globus hystiricus;* which he described as an inverted motion of the muscular fibres of the canal, very common in women in early life, and of which he had seen many thousand cases, but never knew it produced death. He described the appearance of the body after death, and said it was internally and externally in perfect health, with the exception of a partial disease of the thyroid gland, and an inflammatory affection of the lining membrane of the windpipe, (occasioned from their contiguity to the ulcers,) and a little narrowness at the entrance of the oesophagus, which he believed to be congenital, as there was no thickening of the part. He attributed the death of Mrs. Lloyd to the extent of the mortification caused by high inflammation, produced by some powerful application. At one time he was encouraged that the patient might possibly recover, because the diseased and healthy parts were separating. In answer to questions from the judge, he said, that the state of the wound, as described on the 12th of October, might produce the result

stated; that he thought no man of common prudence or skill would have applied a liquid, which, in two days, would produce such extensive inflammation; though all irritating, external applications sometimes exceeded the expectations of the medical attendant; but he should say, that such conduct was a great proof of rashness and of ignorance. He stated further, that if he had been called in on the 12th, he could most probably have prevented the death; but he could not say positively, as it seemed to be a case of great peril from the beginning.

Mr. Brodie saw the deceased on the 29th of October, and then there was a large sloughing ulcer, which he believed might have been produced by rubbing a corrosive liniment into the parts on the 10th of October; that he did not know of any disease which would be benefited by this kind of treatment. On his cross-examination, he said: It was a general practice to produce counter-irritation, and the same application may be beneficial to one patient and injurious to another, according to habit and constitution. The effect of a liniment or blister, or any other external irritant, as they are called, sometimes goes beyond the effect intended, and the most scientific practitioners may often be deceived in his expectations; he can not always calculate to a nicety what the result will be. He did not recollect any instance in which death has ensued from a blister properly applied, but it may possibly happen, he supposed; over exercise would produce over irritation where a blister has been applied. The treatment of a wound is to be judged from the appearances and the state of the patient. It would be desirable, under such circumstances, to know the nature of the application; but it might not lead to any great difference in the treatment. In cases of poison we do not apply the same remedy, especially where it has been taken into the stomach. Where the application has been external, the character and appearance of the wound must be the guide to the surgeon. Circumstances may occur, in which, when a particular course is intended, a stranger's coming in and pursuing a different one would produce mischief.

On his re-examination, he said: "In the case of such a wound as has been described, and I saw, I should not have thought it necessary to resort to the person who produced it; and I doubt whether, in this case, it would have led to any useful knowledge."

In answer to questions by the judge, he said: "Though I do not think it absolutely necessary, I should have got at the matter if I could. I should think that the spermaceti ointment would not certainly increase the danger of such a wound as that described on the 12th of October. I never saw such an effect produced by an ordinary medical application. There are some constitutions in which very slight remedies will produce dangerous consequences. I have seen one person die of the bite of a leech, and another by the sting of a bee. I had no means of knowing any thing of this lady's constitution. I should believe, from evidence I have heard of the way in which the inflammation made progress, that it proceeded rather from the nature of the application, than from the constitution of the party; but it may have depended on both. It is usual to try and ascertain the nature of the constitution. We can not always do it, but in using potent remedies we use great caution. I can not form a positive opinion whether the liniment was rashly used or not, but the impression on my mind is, that it was used without due caution, and therefore either ignorantly or rashly. I have seen many instances of an inflammation from external application, but I never saw so extensive an effect produced as in this instance.

Mr. Frankum then proved that he saw Mrs. Lloyd about a week before her death, and was present at the post-mortem examination; his opinion was that she was very healthy, and that there was not, as far as he could judge, any peculiarity of constitution, which would account for the violent effects produced.

It was claimed, on the part of the prisoner, that the facts alleged, even admitting them to be true, were not legally established. Some of the counts charge the death to have been occasioned by an ulcer and sore produced by an external application, and also by inhaling a certain noxious vapor; and as no evidence had

been given respecting the inhaling, that was not now the subject of inquiry. There is no count imputing ignorance or want of skill, or hastiness, or roughness of practice; and therefore, there being no allegation of that kind, no evidence can be used to influence the jury on that subject. That the rules with respect to indictments clearly precluded all evidence to establish any other cause of death than that stated in the indictment. It is the mind that constitutes the individual a criminal, and not the act done. The indictment charged the prisoner with the offense of manslaughter. Manslaughter may be an offense committed on the sudden, in a moment of intemperate feeling, or it may be caused in the prosecution of an illegal act. There may be justifiable homicide, and homicide *per infortunium;* and it is this latter kind of homicide of which the act complained of consists. Where a man in an honest mind does an act which he thinks right and death ensues, it is homicide *per infortunium.* The defence of the prisoner was claimed to be founded on Sir Matthew Hale's rule, and that this rule was adopted by all text writers on criminal law. It was claimed that that rule was, "when a potion is given without any intention of doing bodily hurt, but with an intention to cure or prevent a disease, and, contrary to the expectation, it produces death, it is not manslaughter." It was said the prisoner can not call any witness to prove what the liquid was, as its composition is only known to himself, etc.

Bailey, B., after saying there were conflicting authorities on the point of law raised by the defence; that he would reserve the points, that his opinion and that of other judges were against the doctrine advanced, believing, as they thought, the intention might have been good. If there was want of due circumspection, the prisoner would be guilty of manslaughter. As to the indictment not being supported by the evidence, it was sufficient that it was alleged that the prisoner felonously applied the remedy used. For, he said: "if a man, either with gross ignorance, or gross rashness, administers medicine, and death ensue, it will be clearly felony.

It was also claimed by the defense, that trespass was the foundation of felony, and that it must be proved; but BAILEY, B., said in this case: "we may judge of the thing by the effect produced, and that may be evidence from which the jury may say whether the thing which produced such an effect was not improperly applied," and Bolland said: "when you pass the line which the law allows, then you become a trespasser."

The same witnesses testified, and essentially the same things were proved as on the previous trial of Miss Cashin.

The charge of BAILEY, B., is an able one. He said: "The indictment charges the prisoner, as having caused the death of Mrs. Lloyd, by the application of a certain liquid; and the points for your consideration will be;—first, whether Mrs. Lloyd came to her death by the application of the liquid; and, secondly, whether the prisoner, in applying it, has acted feloniously or not; to my mind it matters not whether a man has received a medical education or not; the thing to look at is, whether, in reference to the remedy he has used, and the conduct he has displayed, he has acted with a degree of caution; or, on the contrary, has acted with gross and improper rashness and want of caution. I have no hesitation in saying for your guidance, that if a man be guilty of gross negligence in attending to his patient, after he has applied his remedy, or of gross rashness in the application of it, and death ensues in consequence, he will be liable to a conviction for manslaughter. There is no pretence in the present case for saying there was any degree of negligence, after the application of the liquid, because it seems that the prisoner did not know where Mrs. Lloyd lived; and when he was sent for on the 12th, he went, but was almost immediately dismissed, and was not allowed to see her afterward. If you should be of opinion that the prisoner made the application with a culpable degree of rashness, and that it was the cause of Mrs. Lloyd's death, then, heavy as the charge against him is, he will be answerable on this indictment for the offense of manslaughter. There was a considerable interval between the application of the liquid and the

death of the patient; yet if you think that the infliction of the wound on the 10th of October, was the cause of the death, then it is no answer to say that a different course of treatment by Mr. Campbell might have prevented it. You will consider these two points—first, of what did Mrs. Lloyd die? You must be satisfied that she died of the wound which was the result of the application made on the 10th October; and then, secondly, if you are satisfied of this, whether the application was a felonious application? This will depend upon whether you think it was gross and culpable rashness in the prisoner to apply a remedy which might produce such effects, in such a manner that it did actually produce them. If you think so, then he will be answerable to the full extent."

The verdict, in this case was not guilty.

These cases have been given at some considerable length, because they contain the principles upon which this class of cases have heretofore been considered and decided in England. They have been the cases to which American judges have referred, and by which they have been guided. They have generally been followed. There is no doubt that a greater degree of skill and general qualification is required at the present day, at the hands of the professional man, than formerly. He must bring to the accomplishment of what he undertakes a reasonable degree of skill, considering the advancement and improvements of science.

CHAPTER XV.

CRIMINAL MALPRACTICE—AMERICAN ADJUDICATED CASES, ETC.

COMMONWEALTH *v.* SAMUEL THOMPSON; 6 Mass. Reports, 134.

THIS is the leading American case on Criminal Malpractice.

In this case, most of the elements of Willful Malpractice are distinctly and ably set forth by the able Chief-Justice Theophilus Parsons. It will be necessary to give the case in detail, that its points may be well understood.

"At the beginning of the term the prisoner (Thompson,) was indicted for the willful murder of Ezra Lovett, by giving him a poison called lobelia, on the ninth day of January last, of which he died the next day. On the 20th of December, at an adjournment of this term, the prisoner was tried for this offense, before the Chief-Justice and the Judges Sewall and Parker.

On the trial it appeared in evidence that the prisoner, some time in the preceding December, came into Beverley, where the deceased then lived, announcing himself as a physician, and professed an ability to cure all fevers, whether black, grey, green or yellow; declaring that the country was imposed upon by physicians, who were all wrong if he was right. He possessed several drugs, which he used as medicine, and to which he gave singular names. One he called "coffee," another, "well-my-gristle," and a third "ram-cats." He had several patients in Beverley and in Salem, previous to Monday, the 2d of January, when the deceased, having been for several days confined to his house by cold, requested that the prisoner might be sent for as a physician.

He accordingly came, and ordered a large fire to be kindled, to heat the room. He then placed the feet of the deceased, with

his shoes off, on a stove of hot coals, and wrapped him in a thick blanket, covering his head. In this situation he gave him a powder in water, which immediately vomited him. Three minutes after he repeated the dose, which, in two minutes, operated violently; he again repeated the dose, which soon operated with still greater violence. These doses were all given within the space of half an hour; the patient in the meantime drinking copiously of a warm decoction, called by the prisoner coffee. The deceased, after vomiting up phlegm, but no food, was ordered to a warm bed, and appeared to be comfortable, complaining of debility; and in the afternoon he was visited by the prisoner, who administered two more of his emetic powders in succession, which vomited the deceased, who, during the operation, drank of the prisoner's coffee, and complained of much distress. On Wednesday morning the prisoner came, and, after causing the face and hands of the deceased to be washed in rum, ordered him to walk in the air, which he did for about fifteen minutes. In the afternoon the prisoner gave him two more of his emetic powders, with draughts of his coffee. On Thursday the deceased appeared to be comfortable, but complained of great debility. In the afternoon the prisoner caused him to be again sweated, by placing him, with another patient, over an iron pan, with vinegar, covering them at the same time with blankets. On Friday and Saturday the prisoner did not visit the deceased, who appeared to be comfortable, although complaining of increased debility. On Sunday, the debility increasing, the prisoner was sent for, and came in the afternoon, when he administered another of the emetic powders, following it with his coffee, which vomited the deceased, causing him much distress. On Monday he appeared comfortable, but with increasing weakness, until evening, when the prisoner visited him, and administered to him another of his emetic powders, and in about twenty minutes repeated the dose. This last dose did not operate. The prisoner then administered pearlash, mixed with water, and afterward repeated his emetic potions. The deceased appeared to be in great distress, and said he was dying. The

prisoner then asked him how far the medicine had got down; the deceased, laying his hand on his breast, answered, "Here;" to which the prisoner observed, "The medicine would soon get down and *unscrew his navel*"—meaning, as was supposed by his hearers, that it would operate as a cathartic. Between nine and ten o'clock in the evening, the deceased lost his reason, and was seized with convulsive fits—two men being required to hold him in bed. After he was seized with convulsions, the prisoner got down his throat one or two doses of his emetic powder, and remarked to the father of the deceased, that his son had got the *hyps* like the devil, but that his medicines would fetch him down—meaning, as the witness understood, would compose him. The next morning the regular physician of the town was sent for; but the patient was so completely exhausted that no relief could be given. The convulsions and the loss of reason continued, with some intervals, until Tuesday evening, when the deceased expired.

From the evidence it appeared that the coffee administered was a decoction of marsh rosemary, mixed with the bark of bayberry-bush, which was not supposed to have injured the deceased. But the powders, which the prisoner said he principally relied upon in his practice, which was the emetic so often administered by the defendant, was the plant called Indian tobacco.

The Solicitor-General also stated, that before the deceased had applied to the prisoner, the latter had administered the like medicines with those given, to several of the patients, who had died under his hands; and to prove this statement he called several witnesses, of whom but one appeared. He, on the contrary, testified that he had been the prisoner's patient for an oppression in the stomach; that he took his emetic powders several times, in three or four days, and was relieved from his complaint, which had not since returned; and there was no evidence in the case that the prisoner, in the course of his very novel practice, had experienced any fatal accident among his patients.

The defense stated by the prisoner's counsel was, that he had,

for several years, and in different places, pursued his practice with much success, and the death of the deceased was unexpected, and could not be imputed to him as a crime. But the court were satisfied that the evidence produced on the part of the commonwealth did not support the indictment. The prisoner was not put on his defense.

The Chief-Justice charged the jury; and the substance of his direction, and several expressions that fell from the court during the trial, are, for greater convenience, here thrown together.

PARSONS, C. J.—As the testimony of the witnesses was not contradicted, nor their credit impeached, it might be considered as containing the necessary facts, on which the issue must be found.

That the deceased lost his life by the unskillful treatment of the prisoner, did not seem to admit of a reasonable doubt; but of this the jury were to be the judges. Before the Monday evening previous to the death of Lovett, he had, by profuse sweats, and by often-repeated doses of the emetic powders, been reduced very low. In this state, on that evening, other doses of this Indian tobacco were administered. When the second potion did not operate, probably because the tone of his stomach was destroyed, the repetition of them, that they might operate as a cathartic, was followed by convulsions, loss of reason and death.

But whether this treatment, by which the deceased lost his life, is or is not felonious homicide, is the great question before the jury.

To constitute the crime of murder, with which the prisoner was charged, the killing must have been with malice, either expressed or implied. There was no evidence to induce the belief that the prisoner, by this treatment, intended to kill or injure the deceased, and the ground of express malice must fail. It has been said that implied malice may be inferred from the rash and presumptuous conduct of the prisoner, in administering such violent medicines. Before implied malice can be inferred, the jury must be satisfied that the prisoner, by his treatment of his patient, was willfully regardless of his social duties, being determined on mis-

chief. But there is no part of the evidence which proves that the prisoner intended, by his practice, any harm to the deceased. On the contrary, it appears that his intention was to cure him. The jury would consider whether the charge of murder was, on these principles, satisfactorily supported.

But though innocent of the crime of murder, the prisoner, on this indictment, may be convicted of manslaughter, if the evidence be sufficient; and the Solicitor-General strongly urged that the prisoner was guilty of manslaughter, because he rashly and presumptuously administered to the deceased a deleterious medicine, which, in his hands, by reason of his gross ignorance, became a deadly poison.

The prisoner's ignorance in the case is very apparent. On any other ground consistent with his innocence, it is not easy to conceive that, on the Monday evening before the death, when the second dose of his powerful emetic had failed to operate, through the extreme weakness of the deceased, he could expect a repetition of these fatal poisons would prove a cathartic, and relieve the patient; or that he could mistake convulsive fits, symptomatic of approaching death, for a hypochondriac affection. But, on considering this point, the court were all of the opinion, notwithstanding this ignorance, that if the prisoner acted with an *honest intention*, and expectation of curing the deceased by this treatment, although death was the result unexpected to him, he was not guilty of manslaughter.

To constitute manslaughter, the killing must have been the consequence of some unlawful act. Now, there is no law which prohibits any man from prescribing for a sick person with his consent; and it is not a felony if, through his ignorance of the quality of the medicine prescribed, or of the nature of the disease, or of both, the patient, contrary to his expectation, should die. The death of a man, killed by voluntarily following a medical prescription, can not be adjudged felony in the party prescribing, unless he, however ignorant of medical science in general, had so much knowledge, or probable information of the

fatal tendency of the prescription, that it may be reasonably presumed by the jury to be the effect of willful rashness, at the least, and not of an honest intention and expectation to cure.

In the present case there is no evidence that the prisoner, either from his own experience or from the information of others, had any knowledge of the fatal effects of the Indian tobacco, when injudiciously administered; but the only testimony produced on that point proved that the patient found a cure from the medicine.

The law, thus stated, was conformable, not only to the general principles which governed in charges of felonious homicide, but also to the opinion of the learned and excellent Lord Chief-Justice Hale. He expressly states that if a physician, whether licensed or not, gives a person a potion without any intent of doing him any bodily hurt, but with intent to cure or prevent disease, and, contrary to the expectation of the physician, it kills him, he is not guilty of murder or manslaughter.

If, in this case, it had appeared in evidence, as was stated by the Solicitor-General, that the prisoner had, in administering this Indian tobacco, experienced its injurious effects, in the death or bodily hurt of his patient, and that he afterward administered it in the same form to the deceased, and he was killed by it, the court would have left it to the serious consideration of the jury, whether they would presume the prisoner administered it from an honest intention to cure, or from obstinate rashness and foolhardy presumption, although he might not have intended any bodily harm to his patient. If the jury should have been of this latter opinion, it would have been reasonable to have convicted the prisoner of manslaughter, at least; for it would not have been lawful for him again to have administered the medicine, of which he had such fatal experience.

It is to be exceedingly lamented that people are so easily persuaded to put confidence in these itinerant quacks, and to trust their lives to strangers without knowledge or experience. If this astonishing infatuation should continue, and men are found to

yield to the impudent pretensions of ignorant empiricism, there seems to be no adequate remedy by a criminal prosecution, without the interference of the Legislature, if the quack, however weak and presumptuous, should prescribe, with honest intentions and expectations of relieving his patients.

The prisoner was acquitted."

In this case there can be no doubt, as stated by the court, that Thompson killed his patient; yet the common law, in the opinion of the court, affording no punishment, statutory law must come in to supply a remedy, if one is afforded at all. This case, going off as it did, aroused the people of Massachusetts, and the Legislature immediately passed a law making it illegal for any person to practice medicine or surgery without being duly qualified. Had such a law existed when the above case was tried, Thompson would probably have been convicted of manslaughter, because—although he was trying to cure his patient—being engaged in an illegal business, he would have been criminally responsible, under the rule of the common law, that when death occurs by the act of one who is in pursuit of an unlawful design, or doing an illegal thing, without any intention to kill, it is a felony.

So, where a physician was indicted for the murder of a person who had died of small-pox, communicated by him to his patient, whom he had inoculated, and was convicted of manslaughter, it was held, on a motion for a new trial, that as the physician did not appear to have designed the death of the deceased, the indictment was fatally defective.[1]

The learned Judge Parsons, in the Thompson case, held doctrine contrary to that laid down by the English courts, in the cases of Nancy Simpson, Wilcox, 227; Spiller, 5 Car. & P. 335; Furguson, Lewin, 131; Senior, 1 Mood. 405; Tessymond, Lewin, C. C. 169; Williamson, 3 Car. & P. 635; Van Butchell, 3 Camp. 629; Long, 4 C. & P. 435, 398; Webb, 1 M. & R. 405.

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[1] Fairlee *v.* The People, 11 Ill. 1. See, also, Rice *v.* State, 8 Miss. 561; Holmes *v.* Slate, 23 Ala. 17.

In these cases, it was held, if there was gross ignorance, carelessness, negligence or rashness, in any one who undertakes to administer medicine, without any intent to do harm, it amounted to manslaughter.

Judge Denio holds the same doctrine in the case of Thomas *v.* Winchester, 2 Selden, 409.

It will be seen from the cases given, that there has been some vacillation in the courts, as to the rule to be applied to medical men in cases of alleged Criminal Malpractice. The original rule being, that if a medical man gave to his patient medicine to help him, and the result was that it killed him, "it was neither murder nor manslaughter, but misadventure." Afterward it was held that if the physician or surgeon was not regularly educated or appointed, who caused the death, though unintentionally, it was manslaughter at least. Then it was held "that the prisoner must have been guilty of criminal misconduct, arising either from the grossest ignorance, or the most criminal inattention," to sustain the charge of manslaughter. At this time the rule may be considered that laid down by Boland, B., in the Spiller case,[1] where the prisoner was indicted for manslaughter, by causing the death of a child, by putting a plaster, made of corrosive and dangerous ingredients, upon its head; it appearing that the child, for eighteen months, had been afflicted with scald head, and was taken to the defendant, who applied two plasters, successively, all over its head. Two surgeons proved there was a general sloughing of the scalp, which caused the death, and in their opinion, this might have been produced by the plasters; there was no evidence to show of what the plasters were composed.

Boland, B., said: The law, as I am bound to lay it down,—and I believe I lay it down as it has been agreed upon by the judges; for cases of this kind have occurred of late more frequently than in former times,—is this: if any person, whether a regular or irregular medical man, professes to deal with life or

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[1] Rex *v.* Spiller, 5 Car. & P. 333.

health of His Majesty's subjects, he is bound to have competent skill to perform the task that he holds himself out to perform; and he is bound to treat his patients with care, attention and assiduity." The court here undoubtedly means, that the medical man must be able to do all he promises to do, or all that he induces his patients to believe he can perform.

So in the Ferguson case, it was held, COLERIDGE, J., that no man was justified in making use of an instrument, in itself a dangerous one, unless he did so with proper skill and caution. If the jury thought that in this instance the prisoner had used the instrument with gross want of skill or gross want of caution, and that the deceased thereby lost her life, it would be their duty to find the prisoner guilty.

So in another case, where the prisoner was indicted for manslaughter, in causing the death of R. R., by administering to her a large quantity of Morrison's pills,—the deceased, being ill of smallpox, had sent for the prisoner, and under his advice had taken large quantities of them, from time to time, till death occurred. Several medical men testified, that medicine of the severity of the pills could not be given in such quantities without accelerating death.

Lord LYNDHURST, C. B., held: When proper medical assistance can be had, a person totally ignorant of the science of medicine, takes on himself to administer a violent and dangerous remedy to one laboring under disease, and death ensues in consequence of that dangerous remedy having been so administered, then he is guilty of manslaughter.[1]

A medical man can, of course, in no case, violate the person of his patient, under the pretense that he was thereby treating her medicinally, for the complaint for which he was then attending her, even though she makes no resistance, and positively consents, owing solely to the *bona fide* belief that it was necessary. This outrageously criminal practice has, on several occasions, been attempted. The following is the leading case:

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[1] Rex *v.* Webb, 1 M. & Rob. 405; 2 Lew. 196.

THE QUEEN *v.* WILLIAM CASE; 5 British Crown Cases, 587.

In this case, tried at the April Quarter Sessions, A. D., 1850, the defendant's counsel, in his address to the jury, contended that the girl was a consenting party, and, therefore, the charge of assault could not be sustained. The Recorder told the jury that the girl was of an age to consent to a man having carnal connection with her, and that if they thought she consented to such connection with the defendant, then he ought to be acquitted; but that if they were satisfied she was ignorant of the nature of the defendant's act, and made no resistance, solely from a *bona fide* belief that the defendant was, as he represented, treating her medicinally, with a view to her case, his conduct, in point of law, amounts to an assault.

The jury found the defendant guilty, and he was sentenced to be imprisoned eighteen calendar months in the jail.

The Recorder reserved for the highest criminal court in England, the question, whether his direction was correct in point of law.

The case was argued on the 1st of June, 1850. It was claimed for the prisoner—*First*, That on the case, as stated, the jury could not be taken to have found an assault, because they were directed to find him guilty, if they thought the girl made no resistance; that no resistance was equivalent to consent; that if where there was consent there was no assault. (Reed's case, 1.) That it was clear that she consented to the mechanical act of connection; and, therefore, the prisoner did not do it against her will. In Reed's case it was found that the girl consented in fact, though, from her tender age, she did not know what she was about. *Secondly*, If she did not consent, it was a rape; for there can be no distinction, in principle, between a dissent which makes a connection an assault, and a dissent which makes it a rape: fraud and force stood on the same footing.

WILDE, C. J., said this case is free from doubt. The finding of the jury is clear. They are told that if they think she consented to the carnal connection, they must acquit; that the girl

was competent to consent, and that it is a question for them to say whether she did so or not. This is said to be qualified by what follows, viz.: that if they thought she made no resistance, solely because she thought the prisoner was treating her medicinally, they should convict of an assault. I do not see that this is any qualification; it is strictly correct direction. The girl was fourteen years old. She might, at that age, be ignorant of the nature of the act, morally as well as physically, and of its possible consequences. It is said she made no resistance, and, therefore, she must be viewed as a consenting party. This is a fallacy. Children who go to a dentist make no resistance, but they are not consenting parties. The prisoner disarmed her by fraud. She acquiesced under a misrepresentation that what he was doing was with a view to cure her, and that only; whereas it was done solely to gratify the passion of the prisoner. How does this differ from a case of total deception? She consented to one thing: he did another materially different, on which she had been prevented, by fraud, from exercising her judgment and will. The cases which have been referred to, show that where consent is caused by fraud, the act is, at least, an assault, and, perhaps, may amount to a rape. It has been suggested that were the act of the prisoner to be regarded in the light of medical treatment, it would be no offense, and that it was not left to the jury whether the prisoner did not intend it as such. That certainly was not left to the jury, nor need have been. The notion that a medical man might lawfully adopt such a course of treatment is not to be tolerated in a court of justice.

ALDERSON, B.—The case seems quite undistinguishable from those in which it has been held, that if a man possesses himself of a woman's person by fraud, it is equivalent to force. The objection that it amounted to rape was not taken.

COLERIDGE, J.—The jury have found that the prisoner got possession of the girl's person by fraud: so the act is an assault. It must not be assumed that the case would be different, even had they found that the prisoner intended it as medical treatment.

CHAPTER XVI.

ABORTION—FŒTICIDE.

Medically and technically, abortion consists in the separation and expulsion of the immature ovum from the uterus. At first, the attachment between the mother and the fœtus, at the points of connection between the chorion and decidua, is very slight. Afterward the connection becomes stronger and more intimate, and the separation more difficult.

W. Tyler Smith, a late English writer of high authority upon obstetrics, defines abortion, "as the premature expulsion of the ovum at any time after it become viable, and before the twenty-seventh or twenty-eighth week of pregnancy. Up to the latter date, the fœtus is not viable; but after the completion of the sixth month, it may with care be reared."[1] The discharge of the ovum between the second and the twenty-eighth week, has been termed a miscarriage, still it is convenient and proper to consider all expulsions of the ovum, previous to the time at which the fœtus become viable, under the head of abortion.

The natural causes of abortion, or the premature expulsion of the fœtus from the uterus, are numerous. Disease, in all its forms, is a great and fruitful cause of abortion. Some women, for this or other reasons, throw off the ovum or embryo with great facility, while in others abortion can not be produced without greatly endangering life. It is in these latter cases that courts are most frequently called upon to investigate the matter.

There is no absolute and positive specific for effecting this result, though the general supposition among women is, that physicians have the agents by which it can surely be brought

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[1] A Manual of Obstetrics; London Edition, 1858, p. 137.

about medicinally. While the ergot has an undoubted specific effect upon the uterus, it can not be depended upon to produce abortion. Probably, in the majority of cases, premature labor may be induced by it. Savin and the oil of tansy, also have the reputation of being effectual in this respect; still they have no direct effect, like ergot, upon the fibers of the uterus. They are stimulant poisons, and as such, will sometimes produce abortion. So great is the reputation of these drugs as abortives, and being of no value as medicines, it may be safely concluded that when taken the purpose is to produce abortion. Purgative medicines are very generally resorted to with success for this purpose. The primary action is on the bowels, but the secondary effect upon the uterus is often sufficiently powerful to dislodge the fœtus.

Mechanical means through the vagina is common; either by violence to the body of the uterus, its neck, or by rupturing the membranes. Of course, this is attended with great danger. Difficult, dangerous and delicate, as the operation is, of rupturing the membranes, yet it is not unfrequently attempted by the mother herself. It is a dangerous experiment when attempted by the most skillful anatomist, who has every advantage, from his knowledge of the parts, calmness, and position;—what then must it be when attempted by an ignorant excited mother, operating upon herself!

That the evil of producing abortion is a more serious one than legislators and jurists seem to suppose, there can be no doubt. There is a defective moral sense upon the subject. It is not looked upon as it should be except by the few.

Prof. Hugh L. Hodge, of Philadelphia, in an introductory lecture on Criminal Abortion, sets forth the importance of the evil in its proper light, and with great force. He says: "We blush while we record the fact, that in this country, in our own cities and towns; in this city, where literature, science, morality and Christianity are supposed to have so much influence; where all the domestic and social virtues are reported as being in full and delightful exercise; even here, individuals, male and female, exist,

who are continually imbruing their hands and consciences in the blood of unborn infants; yea, even *medical* men are to be found, who for the trifling pecuniary recompense, will poison the fountain of life, or forcibly induce labor, to the certain destruction of the fœtus, and not unfrequently of the parent.

So low, gentlemen, is the moral sense of the community on this subject; so ignorant are the greater number of individuals, that even mothers, in many instances, shrink not from the commission of this crime, but will voluntarily destroy their own progeny, in violation of every natural sentiment, and in opposition to the laws of God and man. Perhaps there are few individuals in extensive practice as obstetricians, who have not had frequent applications made to them by the fathers or mothers of unborn children—respectable and polite in their general appearance and manners—to destroy the fruit of illicit pleasure, under the vain hope of preserving their reputation by this unnatural and guilty sacrifice.

Married women also, from the fear of labor, from indisposition to have the care, the expense, or the trouble of children, or some other motive equally trifling and degrading, have solicited that the embryo should be destroyed by their medical attendant. And when such individuals are informed of the nature of the transaction, there is an expression of real or pretended surprise, that any one should deem such an act improper—much more, guilty; yea, in spite even of the solemn warning of the physician, they will resort to the debased and murderous charlatan, who for a piece of silver, will annihilate the life of the fœtus, and endanger even that of the ignorant and guilty mother.

This low estimate of the importance of fœtal life is by no means restricted to the ignorant or to the lower classes of society. Educated, refined and fashionable women—yea, in many instances, women whose moral character is, in other respects, without reproach; mothers who are devoted, with an ardent and self-denying affection, to the children who already constitute their family, are perfectly indifferent respecting the fœtus in the uterus. They

seem not to realize that the being within them is indeed *animate*—that it is, in verity, a *human being*—body and spirit; that it is of importance, that its value is inestimable, having reference to this world and the next. Hence, they in every way neglect its interests. They eat and drink; they walk and ride; they will practice no self-restraint, but will indulge every caprice, every passion, utterly regardless of the unseen and unloved embryo. They act with as much indifference as if the living, intelligent, and immortal existence lodged within their organs, were of no more value than the bread eaten, or the common excretions of the system. Even in cases where mothers have suffered from repeated abortions, where fœtus after fœtus has perished through their neglect or carelessness, and when even their own health is involved in the issue, even in such cases, every obstetrician can bear testimony to the great difficulty of inducing our wayward patients to forego certain gratifications, to practice certain self-denials, and to adopt efficient means for the salvation of the child.

This is not all. We can bear testimony, that in some instances, the woman who has been well educated, who occupies a high station in society—whose influence over others is great, and whose character has not been impugned, will deliberately resort to any and every means which may effectually destroy her unborn offspring. Ashamed or afraid to apply to the charlatan, who sustains his existence by the price of blood, and dreading publicity, she boldly and recklessly adopts measures, however severe and dangerous, for the accomplishment of her unnatural and guilty purpose. She will make extra muscular efforts, by long, fatiguing walks, by dancing, running, jumping, kept up as long as possible; she will swallow the most nauseous, irritating and poisonous drugs, and in some instances, will actually arm herself with the surgeon's instrument, and operate upon her own body, that she may be delivered of an embryo, for which she has no desire, and whose birth and appearance she dreads.

These facts are horrible, but they are too frequent and too

true. Often, very often must all the eloquence and all the authority of the practitioner be employed; often he must, as it were, grasp the conscience of his weak and erring patient, and let her know, in language not to be misundersood, that she is responsible to her Creator for the life of the being within her."

The question of the criminal responsibility of the medical practitioner, in cases of abortion in common practice, is beginning to receive the attention of able medical writers. There is no doubt that abortion is often brought about by the medical attendant, without a full appreciation of the value of embryo life.

Horatio R. Storer, M. D., of Boston, has recently published an able article on this subject, in the April number of "The American Journal of the Medical Sciences, for 1859," from which we make some extracts illustrative of this subject. He says: "Whenever, by any operation or other procedure, a physician directly produces abortion, unintentional though it may be, if, in the absence of any precaution that might have been taken, he must be considered, to the extent evidenced by the history of the patient, responsible therefor; and the class of cases to which that now reported belongs, is accordingly open to as legitimate a question of obstetric morality and of criminal responsibility as that other series, of late so ably discussed by Dr. Churchill, of Dublin."

This highly moral, humane and legally sound proposition is illustrated by the writer by two cases. The first, was where the patient was suffering from excessive toothache while five and a half months gone with her first child; in other respects of good health, there being no other neuralgic pain. All the usual means had been exhausted, such as anodynes, antispasmodics, purgatives, fomentations, counter-irritants, the extraction of a carious tooth,—all without the slightest relief. The patient was threatened with abortion, and begged that it might be brought about, declaring, if refused, she would induce it upon herself rather than endure further pain. This case was immediately cured by "a fragment of pellitory root, pyrethrum, as a direct gingival stimulant, though

horseradish would probably have as soon answered the purpose," there being but a slight attack afterward, and relieved by the same treatment. He says: "I report this case for two reasons. In the first place, as an instance of the frequent success of simple and apparently trivial remedies, after severe ones have failed. The affection seems to have been entirely neuralgic in its character, reflex, the result of the uterine irritation. All other causes mentioned by writers as liable to produce it were absent; there was no local inflammation, no general catarrhal affection; the disorder did not commence at, and apparently was in no way dependent upon, the carious tooth, at least it was not relieved by its removal, nor by the local bloodletting this occasioned. The second of the reasons referred to is the following: that I may express my strong disavowal of the practice still extensively obtaining among physicians and dentists, of subjecting patients to the risk of miscarriage, which must be confessed excessive, by the extraction of teeth during pregnancy. This procedure should in no instance be resorted to till every other measure which affords any prospect of relief, has been faithfully employed. In the history reported, it is seen that such is not the case.

Extraction has been recommended by authorities who are respected; by Campbell, Gardieu, Capuron and others, on the supposition that there is a greater likelihood of abortion from the continued pain; but against this argument I place the facts, that after resisting many remedies, the pain often disappears spontaneously,—as indeed allowed by one of the writers instancing Capuron,—and that in more plausible measures, tried and untried, readily occuring upon reflection to all who do not blindly follow the books, there is, I think, a greater probability of success. Anæsthesia, local and general, have both been found to avail. The extraction of teeth in pregnant women can never be defended, except when abortion is actually threatened, and apparently at hand."

The other case was one of flooding. Dr. S. removed an embryo six weeks advanced. The object of this case is not to

illustrate the impropriety of abortion, but to show that from natural causes, or from the effect of previous labors, there may exist a condition of the uterus, that, without the most careful autopsy was made and intelligently viewed,—the abortion having taken place,—the physician might be led erroneously to think there had been criminal interference. In this case, Dr. S., says: "My first impression from the physical examination was of course that the abortion must have been owing to direct instrumental or other violence, which, however, the patient persistingly denied." Again he says: "Upon reviewing this case, I think it important to dwell upon the diagnostic peculiarities it presents, unadverted to, so far as I am aware, by any obstetric writer. We are all familiar with the various permanently disastrous results at times following instrumental or otherwise difficult labor, the adhesions, bands and fistulæ, that not unfrequently come under medical observation; but to find such in the absence of all signs of concomitant or consequent malignant disease, and accompanied by profuse hemorrhage,—their edges cicatriced themselves, and the depressions between them obscured and filled with coagula, and at the same time, and in the midst of these anomalies, the presentation of an aborting ovum,—would raise, I may surely say, in almost every mind, the suspicion of foul and criminal interference. Were death to occur under such circumstances, the result at an inquest could hardly be doubted, unless unusual care was observed at the autopsy to remove by ablution all clots obscuring the age of the existing lesions; a precaution that in most instances would hardly be observed, for fear of disturbing any attachment of the ovum,—so often in these cases preserved in the cabinet,—that might still obtain. I am strengthened in my belief that many of the Medico-legal regulations of criminal abortion are as yet uninvestigated or unfounded, and that with every step toward their elucidation an advance is made toward the ultimate suppression of the crime."[1]

[1] See, also, Essay on Criminal Abortion, North Amer. Med. Chir. Rev. May, 1858.

At Common law the destruction of an infant in utero is a high misdemeanor, and at an early period it was deemed murder; but there must have been quickening.[1] When the child dies subsequently to birth, from wounds received in the womb, it is clearly homicide, even though the child is still attached to the mother by the umbilical cord.[2] If the mother is not yet *quick* with child, it is still an indictable offense to administer a drug and thus procure abortion.[3] "The civil rights of an infant in *ventre sa mere*, are equally respected at every period of gestation; and it is clear, that no matter at how early a stage he may be appointed executor, is capable of taking as legatee, or under a marriage settlement, may take specifically under a general devise as a 'child,' and may obtain an injunction to stay waste."[4] It is true, that in Massachusetts, the Supreme Court held, that at Common law it was no offense to produce abortion, unless there is quickness.[5] The Legislature immediately cured the supposed deficiency by statute. The Supreme Court of Pennsylvania has recently decided that to procure abortion on a woman pregnant, but not quick, is indictable at Common law.[6]

The idea once existed quite generally, and it still exists to some extent, that there is no offense in destroying the embryo or fœtus before there is a manifest knowledge of life by the mother, derived from the motion of the child, called quickening. How absurd to suppose there is no life until the mother can feel the muscular motions of the child. As well might we deny the vitality of the blood because it can not be felt. The muscular tissue, and even the bones to which they are attached, must have

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[1] 1 Russ. on Cr. 671; 1 Vesey, 86; 3 Cooke's Inst. 50; 1 Hawk. c. 13, 8, 16; 1 Hale, 434; 1 East. P. C. 90; 3 Chitty C. L. 798; Wharton's Crim. Law, sec. 1220.

[2] Wharton's Crim. Law, sec. 1220; R. *v.* Senior, 1 Mood. C. C. 36; R. *v.* Trillæ, 2 Mood. C. C. 13.

[3] W. & S. Med. Juris. sec. 344–5; Guy's Med. Juris. tit. Abortion; Lewis C. L. 10.

[4] Wharton's Crim. Law, sec. 1220; 2 Vernon, 710; Swift *v.* Duffield, 6 Serg. & Rawle, 38.

[5] Com. *v.* Parker, 9 Metc. 263.

[6] Mills *v.* Com. 1 Harris, 631.

some degree of substance before there can be motion, and of course, this development depends upon life. Though this foolish notion is now fully exploded in medicine, it still lingers in the popular mind, and doubtless leads to much crime. The life of the fœtus or embryo immediately after conception is just as positive, physiologically, as at any subsequent period. Quickening being an incident or circumstance in the course of development of the fœtus, it indicates not the commencement of a new stage of existence, but only a new manifestation of pre-existing life—it is uncertain in its periods, sometimes coming on at three months, sometimes at six, and sometimes not at all. Massachusetts and New Jersey, therefore, in accordance with these views, have passed statutory enactments to make penal anti-quickening fœticide, the courts of these States having held that at Common law it was not so.[1]

Until within a few years it was believed that if a woman condemned to death had not quickened, though she claimed to be pregnant, her life should not be spared.

It was customary, in the English courts, when the prisoner claimed that she was pregnant, to appoint a jury of matrons to examine her and determine the points. This is illustrated in the case of Rex *v.* Wycherley.[1]

The prisoner was indicted for the willful murder of Ann, her daughter, a child aged three years, by drowning her. "The case being clearly proved, and the prisoner being found guilty, the learned Baron GURNEY passed sentence of death upon her; and on Mr. Bellamy, the clerk of assizes, asking the prisoner if she had any thing to say in stay of execution, she replied: 'I am with child now.'

GURNEY, B. Let the sheriff impannel a jury of matrons forthwith. Let all the doors be shut, and no one be suffered to leave the court. The sheriff went to twelve married ladies who were

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[1] Wharton's Crim. Law, sec. 1227.
[2] 8 C. & P. 262.

present in court, and having obtained their names, returned them in a panel to the clerk, and these ladies were then called, and the forematron was sworn in the following form: 'You, as forematron of this jury, swear that you will diligently inquire, search and try Ann Wycherley, the prisoner at the bar, whether she be *quick* with child or not, and therefor a true verdict give, according to the best of your skill and knowledge. So help you God.' The other matrons were sworn as follows: 'The same oath which your forematron has taken on her part, you shall well and truly observe and keep on your respective parts. So help you God.' A bailiff was then sworn in the following form: 'You shall well and truly keep the jury of matrons without meat, drink or fire, candle and light excepted; you shall suffer no person but the prisoner to speak to them; neither shall you speak to them yourself, unless it be to ask them if they are agreed on their verdict, without leave of the court. So help you God.' The jury of matrons then retired to a private room, and the prisoner was taken to them. After a short time they sent a message into court, that they wished for the assistance of a surgeon. GURNEY, B., said: 'I think that I ought not, considering the terms of the bailiff's oath, to allow a surgeon to go to the room in which the jury of matrons is, and that they should come into court.' The jury came into court, and having publicly expressed a wish for the assistance of a surgeon, the court directed Mr. Greatorex, who was a surgeon and an accoucheur, and who was a witness in another case, to retire and examine the prisoner. This was done, and on the return of Mr. Greatorex to the court, he was sworn: 'You shall true answer make, etc.,' and he stated that he saw no reason to believe that the prisoner was quick with child; his opinion being that she was not with child at all, but that if she was, she could only be in the early stage of pregnancy.

GURNEY, B. 'Quick with child' is having conceived. 'With quick child' is when the child has quickened. Do you understand the distinction?

Mr. Greatorex. 'I do, my lord.'

The jury of matrons again retired, and on their return into court they found a verdict that the prisoner was not quick with child.

Before the time appointed for the execution of the prisoner, she was respited, in order that it might be ascertained with certainty whether she was with child or not."

This is the leading English case, and certainly establishes the position that the child exists legally, from and after conception.

If the intention is to produce abortion, it makes no difference what the article is, used, whether noxious or innoxious, under the statute of 9 G. 4, c. 31, s. 13.[1] Nor need the woman be actually pregnant to constitute the offense.[2]

The following is the statutory law upon abortion in Ohio, passed February 27th, 1834:

That any physician, or other person, who shall willfully administer to any pregnant woman any medicine, drug, substance or thing abortive, or shall use any instrument or other means whatever, with intent thereby to procure the miscarriage of any such woman, unless the same shall have been necessary to preserve the life of such woman, or shall have been advised by two physicians, to be necessary for that purpose, shall, upon conviction, be punished by imprisonment in the county jail, not more than one year, or by fine, not exceeding five hundred dollars, or by both such fine and imprisonment.[3]

That any physician, or other person, who shall administer to any woman, pregnant with a quick child, any medicine, drug or substance whatever, or shall use or employ any instrument or other means with intent thereby to destroy such child, unless the same shall have been necessary to preserve the life of such mother, or shall have been advised by two physicians to be necessary for such purpose, shall, in case of the death of such

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[1] Rex *v.* Coe, 25; 6 C. & P. 403.

[2] 1 Vict. c. 85; R. *v.* Goodchild, 2 C. & K. 293; 1 R. & M. Cr. Cases, 114, 216.

[3] Cur. Stat. 348; Wilson *v.* State, 220, R. 319; State *v.* Vawter, 7 Black. 592.

child or mother, in consequence thereof, be deemed guilty of high misdemeanor, and upon conviction thereof, shall be imprisoned in the penitentiary not more than seven years, nor less than one year.

The other States have similar laws upon the subject of abortion. Mass. Gen. Laws, sess. 1845, c. 27; and 1847, c. 83. New York, sec. 1 of c. 22 of 1846; 2 Rev., 3d Ed, 750—1845, 779. See People *v.* Lohman, 3 Barbour, S. C. 216; People *v.* Stockham, 1 Harris, C. C. 424; Id. 1 Parker, C. C. 285. Virginia Code, p. 724, title 54, c. 191. Mich. R. S. 168—172. Wisconsin R. S. 231

LEADING AMERICAN CASE.

THE PEOPLE *v.* MADAME RESTELL, 2 Barb., 216.

In this important case, heard on writ of error by the Supreme Court of New York, some important points were decided.

The plaintiff in error was convicted upon an indictment which alleged, in the first count, that on the 19th of July, 1846, at the city of New York, she administered to one Maria Bodine, a certain drug or medicine, with intent to procure the miscarriage of the said Maria Bodine, the latter being pregnant with a quick child, and the said drug or medicine not being necessary to preserve her life, by means whereof the death of the child was produced; and that the accused, in the manner and by the means aforesaid, did feloniously and willfully kill and slay such quick child, against, etc. The subsequent counts were similar in form, alleging that the accused used and employed a certain instrument, her hand, her finger, a certain violent means, etc., upon the body of the mother, with the like intent, and with the same result; and concluding in the same manner. The accused was convicted upon the indictment of a misdemeanor. Several exceptions were taken by J. T. Brady, her counsel, to decisions made during the trial.

The court says: "It is contended in behalf of the defendant, that the indictment is invalid; that it neither charges a felony

under the act of March 4th, 1846, nor a misdemeanor under the act of May 13th, 1845. So far as relates to the charge of felony, there is no allegation that the defendant used the means to procure the abortion *with intent thereby to destroy the child.* That is a part, and we deem it an essential part of the definition of the offense contained in the act of 1846. When a particular intent accompanying an act is requisite to constitute a crime, it should be averred in the indictment. This had been decided by the twelve judges of England.

The objection to the charge for a misdemeanor in this case, is not that the indictment does not state enough, but that it avers too much. That objection, if valid, would prevent the conviction for any inferior offense to that charged in the indictment. When such convictions may be had pursuant to the 27th section of the statute containing general provisions concerning crimes and their punishment, the indictment always charges more than what is requisite to constitute the offense virtually proved. But it is well settled that mere surplusage does not vitiate, so long as it is not contradictory.

The indictment against the defendant, charges that she administered to a pregnant woman some drug,—and in another count that she employed some instrument,—with intent thereby to procure a miscarriage of such patient. That is all which the 2d section of the act of May 13th, 1845, requires to constitute a misdemeanor. The indictment, however, goes further, and alleges that the patient was quick with child, and that the death of such child was effected, and characterizes the act of the defendant as felonious. These allegations do not contradict the charge of misdemeanor, nor do they contain a valid charge of felony, which would merge the misdemeanor; because, as has been before remarked, there is no allegation of an intent to destroy the child. It was contended by the counsel for the defendant, that a conviction under the indictment in question would be no bar to a subsequent indictment for a felony on the same facts, and that thus the defendant might be tried and punished twice for the

same act. That would have been as true if the indictment had contained nothing but the charge for the misdemeanor. But the answer to this is, that if it had appeared on the trial that the defendant had been guilty of a felony, that would have merged the misdemeanor, and the defendant's counsel might have called upon the court to instruct the jury, that if they were satisfied that she was guilty of a felony, they should acquit on the indictment then pending; and if the court had, under such circumstances, refused so to charge, it would have been error, for which any conviction would have been reversed. There can be no danger of there being two convictions for the same act, unless the court, or the defendant's counsel commit some mistake which can not be corrected on a writ of error. On the whole, we think the indictment sufficient to sustain the conviction for a misdemeanor."

As to the admissibility of evidence in these cases, the court says: "The principal witness against the defendant was Maria Bodine, on whom the abortion was produced. The defendant's counsel objected to her admissibility as a witness, on the ground that she had been the principal in, and instigator of, the offense charged in the indictment. The law is well settled that a principal is a competent witness against an accessory; so also are the accomplices against their copartners in crime. The principle is founded on rules of public policy. In many cases there is but little other evidence; and it is better that an accomplice should be punished, than that all should escape. Beside, the practice has a tendency to prevent dangerous combinations, under which the worst crimes are perpetrated. In the case of David Conkling, tried for murder, in Orange County, before Van Ness, J., in 1819, Jack Hodges, who shot the deceased, and was therefore the principal, was admitted as a witness, and Conkling was convicted, partly upon his testimony. In the case of the People *v.* Costello, it was expressly decided that the woman on whom the abortion was produced was a competent witness. There can be no doubt upon this point.

It appeared from the evidence of Maria Bodine, that she went to live with a man named Cook, as a housekeeper, in July, 1845. That she had sexual intercourse with him in the following month, which was continued until the latter part of April, 1846, and that she became pregnant in the latter part of that month. After she had stated these facts, on her examination, and, so far as appears from the bill of exceptions, there was nothing to contradict them, the defendant's counsel asked this witness whether she had had any sexual intercourse with any other person than Cook, prior to April, 1846; which question she refused to answer, and she was sustained in such refusal by the court. It is contended that the court should have compelled her to answer. It is apparent that the question, referring in turns to the whole of the witness' previous life, was too general, and might have been rejected for that reason, if the objection had been specifically raised. But that objection was not raised, and the court sustained the witness in her refusal, solely on the ground that she could not be compelled to give an answer that would have a tendency to degrade her character. The rule seems to be well settled in this State, that a witness can not ordinarily be compelled to proclaim his own infamy while on the stand. But if he voluntarily waives his privilege in order to sustain a charge against another, he can not claim it when asked other questions having a tendency to weaken or remove such charge. That would be manifestly unjust, and could not be tolerated. The witness in the case had voluntarily proclaimed her own infamy, in having constant illicit sexual intercourse with one individual for nearly a year, and in aiding, at least, in procuring an abortion of her child, for the purpose of fixing a criminal charge upon the defendant. She thereby precluded herself from claiming any privilege of not answering questions of a similar character, if they related to the same point. But she could not be required further to degrade herself, by going into a history of her whole life. She ought not to be compelled to give more of her disgraceful history than is essential to promote the ends of justice. The practice adopted in cases of bastardy illus-

trates and confirms this principle. There, the mother, after degrading herself by testifying to her illicit intercourse with the reputed father, can be required to state whether she had not similar intercourse with others, about the time of the pregnation of the child. But she can not be compelled to answer questions relating to her chastity at other periods. The question here is, whether the interrogatory put to Maria Bodine was at all revelant to the facts then at issue. There was nothing at issue previous to the 12th of April, 1846. The pregnancy originated subsequent to that time; and the alleged agency of the defendant was, of course, at a later period. Assuredly, the proposed question could not have had any direct bearing upon either of these points. Nor, so far as we can discern, could it have led to any thing material to the defense. When a party intends to coerce an answer tending to degrade a witness, he is bound to show, affirmatively, that the question is revelant; there is nothing to show such relevancy in this case, and the court was right in refusing to compel the witness to answer the question.

The counsel for the defendant next asked the witness whether she had not the venereal disease during the fall of 1845, or in the winter of 1845–6. She objected, for the same reason, to this question, and we think the court below were right in refusing to coerce an answer. The question did not refer to so long a period as that which produced it, but it was in other respects equally objectionable.

The last, and by far the most difficult point raised by this bill of exceptions, is as to the admissibility of the question propounded to Dr. Smith. The witness testified that he had examined Maria Bodine, professionally, and as an overseer of the poor, in the latter part of May and the beginning of June, 1847. He was then asked by the district attorney the following question: "In consequence of your examination, and the opinion you formed, and in consequence of a communication confidentially made to you as a physician, by Maria Bodine, as your patient, cotemporaneously with your examination, what steps did you

take?" The counsel for the defendant thereupon called on the counsel for the prosecution to state the object of this question. They answered, that in order to rebut the presumption arising from the lapse of time between the alleged abortion and the finding of the indictment, and the assumption that the complaint was the offspring of a conspiracy, or perjury, on the part of Maria Bodine, they wished to show by the witness that he wrote to the mayor of the city of New York, and was the cause of the prosecution being instituted. The counsel for the defendant then objected to the question, but the objection was overruled by the court. The witness answered that he wrote to the mayor of New York, on the 2d of August, 1847. And that on the 6th of that month officer Bowyer called on him, and they went together to see Maria Bodine, and that he accompanied her to New York on the 12th of August. The preface to the question was clearly wrong, but that related to the form or manner of asking it, and not to the substance of the question. In such cases, the objection should be specified, for the obvious reason that the party asking the question, may, if he acquiesces, ask it in a correct form. As a leading rule, it is improper for a party to put a leading question to his own witness; but if the other party does not raise the objection specifically at the time, it will not avail him on writ of error. It is not, in fact, one of his exceptions. In this case the defendant's counsel asked what was intended to be proved, and when that was stated, raised the objection, thereby confining it to the question itself, and in effect waiving any objection of a formal character. The only question now is, whether the evidence called for was competent under the circumstances of the case. The delay in preferring the charge was calculated to excite some suspicion of its truth; and that would lead to an impression that the witness might have some sinister motives in making it at all. What was said by the counsel as to his object in asking the question, was based upon the supposition that the testimony might give rise to those unfavorable inferences. If there were circumstances which would

have a tendency to rebut those presumptions, they were relevant, and it was manifestly proper that they should be proved. It often happens that there has been something in the conduct of a witness preferring a true complaint, apparently inconsistent with the main charge; and in such cases, it is the constant practice to adduce explanatory evidence. Such testimony is often given on trials for rape, when the prosecutrix made no outcry at the time of the perpetration of the outrage, or was tardy in making the complaint. That is merely giving evidence of one fact to qualify or explain another, and both are equally relevant.

Upon the whole, we are all of the opinion that there was no error which could have at all prejudiced the defendant, and the judgment of the court below must be affirmed."

PART II.

MEDICAL EVIDENCE.

MEDICAL EVIDENCE.

CHAPTER XVII.

EVIDENCE IN GENERAL—CIRCUMSTANTIAL EVIDENCE.

To determine what is right and what wrong,—to ascertain what is known and what unknown,—to find out what is beneficial for an individual or for society, and what injurious,—to establish good rules of action and abolish bad ones; has been the great legal problem of all ages and in all civilized countries,—making up the labor, and occupying the closest thoughts of the clearest and ablest reflecting minds.

To the attainment of this end, systematic judicial investigations have been originated, and slowly, but steadily consolidated into harmony, and governed by tolerably certain and fixed rules and regulations. The great value of these rules, and their practical importance, can only be measured by the great interests of justice and right, pertaining to life, liberty, reputation and property, which they contribute to establish, protect and settle.

When the rules of law are administered or put into operation, it is assumed that the facts upon which they are predicated are true, as well as those to which they are applied. It is of the greatest importance, therefore, that the evidence upon which these assumed facts stand, be true. The evidence must be true, or the conclusion is erroneous. It is the basis upon which

facts stand. Law is not entitled to rank as a science, until there is such a combination of well established truths, — established upon the true principles of demonstration, as will constitute indubitable evidence of these truths. These truths, when thus established and arranged in a methodical order, receiving the confidence of community, constitute the science of law. Just so far as these claimed truths are true, law is certain; but where they are established on uncertain or doubtful evidence, so far, law is uncertain.

Justice, is the constant and perpetual disposition to render to every being his due; and jurisprudence is the application of this justice in adjusting the differences and difficulties that arise among the several members of human society: by it the rights of each individual are correctly established, if the evidence of the facts in the case is true.

The universal consent of the truth of a particular fact, establishes it beyond dispute, and gives to such fact the very highest human authority. This universal consent having become immemorial, constitutes the basis and authority of the Common law. No further evidence is required of its truth than this universal usage or consent.

The object of jurisprudence, therefore, can not be separated from that of pure science; the common purpose of both is the discovery of truth, and all the whole range of philosophy, moral and physical,—medicine, in its widest sense,—mathematics,—every thing,—which experience and reason has established or can discover, are rendered subservient to the purposes of justice.

While there is, therefore, no limits to the sources and objects of evidence,—being as wide as nature herself, and diverse as the affairs of mankind,—it has ever been a source of great embarrassment and constant diffiulty, to prescribe such rules, boundaries and restrictions for its production and application, as will best and most universally subserve the ends of justice. These rules must necessarily be well guarded, or the ultimate end of all evidence is defeated. They are generally of a negative character,

and exclude certain evidence in particular cases and under particular circumstances, on grounds of general utility and convenience; still, no rules for limiting the introduction or application of evidence, however necessary, can be adopted without hazarding truth and justice.

It has been found proper and useful in many cases to fix definitely and positively the technical and arbitrary effect of a particular kind of evidence, which effect does not actually and naturally appertain to it. Although in some cases these restrictions may even protect error and wrong, yet in the great majority of cases they are found to protect the innocent and favor truth. Some circumstances which might tend to elucidate the truth, yet being of so vague and fallacious a nature, that no general confidence can be placed upon them, it has been found more prudent and safe to reject their application in certain instances, where they might possibly be beneficial, than to submit to the greater mischief and inconvenience that would follow their general reception.

Persons, for various reasons are, or may be, incompetent to give any evidence whatever, on the affirmative or negative side of the issue, though they may know all about it. Defect of understanding, arising either from natural deficiency of intellect, insanity or immaturity of judgment,—want of religious principle,—the conviction for crime,—accomplices in crime,—matters of interest,—when the disclosure would be in violation of professional confidence,—the domestic relation,—are all of sufficient consequence to prevent such persons from being intelligent, good, reliable and truthful witnesses.

Evidence may be positive or circumstantial. Direct or positive testimony is generally of the greatest weight; yet this is not always or necessarily the case.

Medical Evidence is mainly presumptive or circumstantial. Although this is true, it should be no serious objection to its weight and importance. The testimony of a witness is not altogether dependent upon his integrity and veracity. Very much rests upon the intelligence and ability of the witness, to

combine existing facts, which, when combined, lead the mind, by a stern and inflexible chain of logical sequence, to a necessary result, to which the mind must give it its credence.

Presumptive proof differs from direct evidence in this, the facts proved are not the exact facts in issue, and the facts in issue are arrived at by act of reasoning from those other proved facts. A presumptive fact, is only an inference or conclusion of the mind, from other facts that are known; it is a result of reason; a probable inference, resulting from the application of common sense to the circumstances of the case. There are all degrees of presumptions, from the lightest suspicion, to the highest moral certainty. If the presumptive or circumstantial evidence be of sufficient importance as to afford a fair and reasonable presumption of the fact to be tried, it is to go to the jury for what it is worth, and they are to determine what its value is, and whether it is sufficiently convincing to warrant them in finding the facts in issue.[1]

A sterner rule is applied to presumptive evidence in criminal prosecutions, than when used in civil cases. In criminal prosecutions, circumstantial evidence must be such as to produce nearly the same degree of certainty as that which arises from direct testimony. A less degree of probability may be safely adopted as a ground of judgment in civil cases than in criminal prosecutions,—property being of less importance than life and liberty.

Lord Mansfield says: "As mathematical or absolute certainty is seldom to be attained in human affairs, reason and public utility require, that judges and all mankind, in forming their opinion of the truth of facts, should be regulated by the superior number of probabilities on the one hand or the other, whether the amount of these probabilities be expressed in words and arguments, or by figures and numbers."

Though it may be true, as a general principle, that the positive evidence of a fact from creditable eye-witnesses is the most satis-

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[1] Phillipps on Evidence, page 437.

factory that can be produced; yet there are cases, undoubtedly, where circumstantial evidence has been found to establish as high a degree of certainty of a prisoner's guilt, as could have been produced by the most positive direct testimony.

Some presumptions of law are so positive and conclusive, as not to admit of contrary proof. It is a presumption of law, that innocence is to be presumed, till the guilt is made to appear, by conclusive evidence, and this is founded in general principles of justice. That a child born during wedlock shall be presumed to be legitimate, is a presumption of the same kind. When a person is found dead, and in the absence of testimony to the contrary, the presumption is he died a natural death, because it is "appointed unto all men once to die." Grants and deeds are presumed to support a long and continuous possession; and this is founded on principles of public policy and convenience.

The force and importance of circumstantial evidence is well stated by one of the ablest and most learned judges that ever graced an American bench.

In the case of the Commonwealth against Harman, a case of great interest, where a mother was indicted for the murder of her child, Chief-Justice Gibson, in his charge to the jury, on the subject of circumstantial testimony, used these words:

"I shall confine my remarks to the distinctive character and value of the testimony. No witness has been produced who saw the act committed, and hence it is urged for the prisoner, that the evidence is only circumstantial, and consequently entitled to a very inferior degree of credit, if any credit at all. But that consequence does not necessarily follow: circumstantial evidence is, in the *abstract*, nearly, though perhaps not altogether, as strong as positive evidence; in the *concrete*, it may be infinitely stronger. A fact positively sworn to by a single eye-witness, of blemished character, is not so satisfactorily proved, as is the fact which is the necessary consequence of a chain of other facts, sworn to by many witnesses of undoubted credibility. Indeed, *I scarcely know whether there is such a thing as evidence purely*

positive. You see a man discharge a gun at another; you see the flash, you hear the report; you see the person fall a lifeless corpse, and you *infer*, from all these circumstances, that there was a ball discharged from the gun, which entered his body and caused his death, because such is the usual and natural cause of such an effect. But you did not see the ball leave the gun, pass through the air, and enter the body of the slain; and even testimony to the fact of killing is, therefore, only inferential, or, in other words, circumstantial. It is *possible* no ball was in the gun; and we *infer* that there was, only because we can not account for the death on any other supposition. In case of death from the concussion of the brain, strong doubts have been raised by physicians, founded on appearances verified by the post mortem examination, whether an accommodating apoplexy had not stepped in at the nick of time, to prevent the prisoner from killing him, after the skull had been broken in pieces. I remember to have heard it doubted in this court, whether the death of a man, whose brains oozed through a hole in his skull, was caused by the wound, or a misapplication of the dressings. To some extent, however, the proof of the cause which produced the death rested on circumstantial evidence.

The only difference between positive and circumstantial evidence is, that the former is more immediate, and has fewer links in the chain of connection between the premises and conclusion; but there may be perjury in both. A man may as well swear falsely to an absolute knowledge of a fact, as to a number of facts, from which, if true, the fact on which the question of guilt or innocence depends must inevitably follow. No human testimony is superior to doubt; the machinery of criminal justice, like every other production of man, is necessarily imperfect; but you are not, therefore, to stop its wheels. Because men have been scalded to death, or torn to pieces by the bursting of boilers, or mangled by wheels on a railroad, you are not to lay aside the steam-engine.

Innocent men have, doubtless, been convicted and executed

on circumstantial evidence; but, innocent men have sometimes been convicted and executed on what is called positive proof. What then? Such convictions are accidents, which must be encountered; and the innocent victims of them perished for the common good, as much as soldiers who have perished in battle. All evidence is more or less circumstantial, the difference being only in the degree; and it is sufficient for the purpose, when it excludes disbelief—that is, actual and technical belief; for, he who is to pass on the question is not at liberty to disbelieve as a juror, while he believes as a man.

It is enough that his conscience is clear. Certain cases of circumstantial proofs to be found in the books, in which innocent persons were convicted, have been pressed on your attention. Those, however, are few in number, and they occurred in a period of some hundred of years, in a country whose criminal code made a great variety of offenses capital. The wonder is, that there have not been more. They are constantly resorted to, in capital trials, to frighten juries into a belief that there should be no conviction on merely circumstantial evidence. But the law exacts a conviction, whenever there is *legal* evidence to show the prisoner's guilt, beyond a doubt; and circumstantial evidence is legal evidence.

If the evidence in this case convinces you that the prisoner killed her child, although there has been no eye-witness of the fact, you are bound to find her guilty. For her sake, I regret the tendency of these remarks; but it has been our duty to make them, and it will be yours to attend to them."

The circumstantial evidence brought out by the conclusions of science, like that of the medical witness, is often much stronger than what passes for positive proof: thus, in the case of Dr. Webster; science took the mutilated remains of a jaw bone, and the artificial teeth that had been fitted to it,—rescued from the smouldering ashes,—and proved beyond controversy and doubt, that they belonged to Dr. Parkman,—Dr. Keep having made the artificial teeth and fitted them to the jaw of Dr. Parkman in life.

Dr. Wyman, the scientific and accomplished anatomist, brought the burnt fragments together, thus reproducing the bone in its original form. The cast upon which the teeth were made corresponded to this bone. The circumstances were so strong that the jury could not resist the conclusion that the jaw bone belonged to Dr. Parkman.

One of the most general rules for the introduction of evidence is thus given by Starkie: "To admit every light which reason and experience can supply for the discovery of truth, and to reject that only which serves not to guide, but to bewilder and mislead, are the great principles which ought to pervade every system of evidence. It may safely be laid down as an universal proposition, that the less the process of inquiry is fettered by rules and restraints, founded on extraneous and collateral considerations of policy and convenience, the more certain and efficacious will be its operation."

The common or unprofessional witness is expected and required to testify only to *facts*, and such facts as are, *at the time*, within his knowledge and recollection. A statement of facts read from a paper will not be received as testimony, if the witness has no recollection of these facts outside of such paper, because, if the paper is proper to be submitted to the jury, they ought to have it as evidence, in which case it would be better evidence than what the witness might say. A paper may be used as a memorandum to assist the witness' memory, and he may be compelled to so use it if the writing is present in court.[1] He must, however, speak not from the paper but from recollection.

The *impressions* of a witness are received as evidence, and the jury may give to them what weight they suppose them to be entitled.[2] And in some cases the *belief* of a witness will be received as evidence; thus, a witness may give his belief as to the identity of a person in question, or of the handwriting in

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[1] Reed *v.* Boardman, 20 Pick. 442.

[2] Clark *v* Reglan, 4 Shepl. 246.

dispute, if he has had an opportunity of knowing such person or handwriting.[1]

As a general thing, however, the witness must *know* and not *believe* the facts to which he deposes. To know, and to believe, are conditions of mind very different; belief is founded upon probable conjecture; knowledge is based upon that certainty which is acquired by our senses or by reason. He who has neither seen nor heard the facts, can only believe them, he can not know them.[2]

The witness can not disclose matter which is indecent or offensive to public morals, or detrimental to the feelings or interests of third persons, and should not disclose that which will criminate or subject himself or others to disgrace.[3]

Counsel are very apt to be precautious that the witness knows whereof he testifies—that he is neither mistaken or desirous to deceive. No facts in the character of an event is known to a demonstration except through the senses. To know a fact then, positively, it must have been seen, and to testify to it properly, he must not only have been present when the fact transpired, but he must have given his attention to the circumstances, so as to fix them in his memory. Hearing is much more deceptive than sight; for, although there are facts which are more properly comprehended and known by hearing, as in case of slander and the like, still it is very easy for the most honest witness, who is guided by the sense of hearing alone, to be mistaken in his judgment, as to the author of such slander. Knowledge acquired alone by hearing is entitled to but little confidence. If more than one sense takes cognizance of the fact it is so much the more certain.

Hearsay evidence is not, in general, deserving of much credit or confidence.

A detailed statement of the reasons and circumstances of the

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[1] Rex *v.* Pedley, Leach Crown Cases, 365.

[2] 3 Bouvier, Inst. 145.

[3] Rex *v.* Hardy, 24 St. Tr. 753, 811; Cowen & Hill's Notes, 531.

conclusions to which the witness has arrived, which he considers facts, if consistent, is the surest means of inducing belief, for then the court, jury and counsel can determine whether the witness has sufficient knowledge of the facts to give force to his testimony, and certainty to his conclusions.

The *manner* of the witness goes far to inspire confidence or distrust. If the witness proceeds in an equivocal, halting manner, not using affirmative terms, he will not receive that degree of credit that he would, if he coolly, firmly and candidly, without any real or apparent prejudice or hesitation, state distinctly what he knows, and upon what his knowledge is founded. If the witness' manner is open, and free from that peculiar restraint and nervousness that usually characterizes the interested or dishonest witness, and if he can give a clear and complete reason for his statement, then he will be believed. If, on the other hand, he is over exact, or very loose in his statement, reluctant, or unable to give a good reason for what he says, he will be distrusted and discredited.

These general suggestions in regard to Evidence, are designed especially for medical men, who have not access to the text books of the legal profession on the subject, the voluminous character and expensiveness of which, if within their reach, would preclude a sufficiently thorough examination to master these general principles. The most industrious medical man finds exhaustless fields of labor in his own profession, and general principles are all he needs or has time to study outside of it.

CHAPTER XVIII.

EXPERTS—PROFESSIONAL OPINIONS.

That class of witnesses who are, by the courts or parties concerned, chosen on account of their special knowledge or skill in particular matters, to testify or make a report embodying their opinions, are generally known as *experts*.

Extra knowledge on questions of science, skill, trade, business or other matters requiring special knowledge, qualifies the person thus informed to give *opinions* in courts of justice. This is contrary to the general rule, that the witness must confine himself to facts, and leave the conclusions of those facts to be determined by a court or jury under oath.

An opinion is the judgment which the mind forms on any proposition, statement, theory or event, the truth or falsehood of which is supported by a degree of evidence that renders it probable, but does not constitute absolute knowledge, truth or certainty.

These opinions, or conclusions of judgment, which make up such opinions of experts, are the same in substance as the verdict of a jury or judgment of a court, which is nothing more than the opinion of such jury or court as to what is established by the facts in the case. This conclusion or opinion, in the latter case, is given under the sanction of an oath;—so is that of the expert. There is this difference, however, in the two cases. The court or jury is under oath while they are making up their opinions upon the facts in the case, and these facts, upon which the opinion is predicated, are also submitted to the minds of counsel and parties. The facts are also given by the common witness under oath, upon which the jury or court makes up an

opinion. The expert, on the other hand, comes to the results constituting his opinion, which is to be received in evidence, from his own private study, observation and reflection. He is not under oath when he weighs his facts, and however anxious he may be to come to correct conclusions, he is not under the significant and impressive obligation of an oath to do so. And though the facts upon which the witness' opinion is based, may be called for by the counsel, yet, from the very nature of the case, it is not to be expected that the jury or court will understand them. This opinion then of the expert, is the private judgment of the witness, given under oath. A juryman can have no private opinion, so far as his verdict is concerned. All he can do is to apply his general knowledge in weighing and applying the facts or professional opinions as they are presented to him by the several witnesses. He may judge of the credibility of a witness as well as of the weight of his statement, but he must not rely on his own knowledge. The juryman's oath is, "to try the issue joined between the parties, and a true verdict give, according to the *evidence*." In the language of the court, in a late case in Massachusetts, 1 Gray, 535, "it has very naturally come to be well settled, that a juror can not give a verdict founded on facts in his private knowledge. If the juror knows any particular fact material to the proper decision of the case, he ought to be sworn as a witness, and in open court, and be publicly examined, so that his evidence, like that of other witnesses, may first be scrutinized as to its competency and bearing upon the issue, and for the further reason that the court and the parties may know upon what evidence the verdict was rendered." If the personal knowledge of a juror was allowed to influence his verdict, the jury might wholly prejudge the case.

From the fact, that the same kind of guards can not be thrown around the opinion of experts as are brought to bear upon the juror, and the additional one, that opinions of experts can not be subjected to that severe scrutiny that other evidence undergoes, this kind of evidence is not of the clear and

positive character, or of the value, of that of facts, as a general rule.

It will however at once be perceived, that this kind of evidence is still of great importance, from its peculiarity; yet, from the crude shape under which it may come before the court or jury, it is to be received with great caution. The professional witness, to a certain extent, assumes the duties of the jury, in that he makes up opinions for them, and were he not subject to thorough cross-examination as to the means of information upon which his opinions are formed, and the reasons for such opinions, his testimony would be dangerous.

The opinion of a witness is in no case evidence, except when the premises upon which he founds his conclusions can not be understood by the court or jury without study or knowledge on that special subject, or without the aid of the knowledge of persons whose skill is superior to their own.[1] A witness is not permitted to give an opinion in evidence, unless such opinion is based upon positive special knowledge. An opinion made up after an event, from no precedent or usage, on a question liable to be governed by fancy and not science or special positive knowledge, is not evidence.[2]

It would seem, however, that this rule was severely crowded, if not departed from altogether, in the case of Richards *v.* Murdock.[3] This was an action on a policy effected by the plaintiff as agent for Mr. Campbell, of Sidney. Upon the trial it appeared that Campbell, having shipped the goods in question by the Cumberland, wrote by another ship, the Australia, to the plaintiff, desiring him to effect an insurance thereon, and telling him at the same time, that in order to give every chance for the Cumber-

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[1] Syracuse Rail Road Co. *v.* Bodley, 10 How. Pr. 289; Moorhouse *v.* Matthews, 2 Com. 514; Luning *v.* The State, 1 Chaud., (Wis.) 178; Protection Ins. Co. *v.* Harmer, 2 Ohio, 452; 7 Foster, (N. H.) 157; 17 Wend. 136; 4 Denio, 311; 7 Cush. 219; 1 Phillipps on Ev. 780.

[2] Carter *v.* Boehm; Smith's Leading Cases.

[3] 10 B. & C. 257.

land's arrival, he had directed the person intrusted with that letter not to deliver it until thirty days after the Australia's reaching London. The Cumberland not arriving at the end of the thirty days, the letter was delivered to the plaintiff, who handed it to his broker, requesting him to effect the insurance, which he accordingly did, with the Indemnity Insurance Company, whom the defendant represented. The whole of the letter was not read to the company's manager. At the trial, it was contended that the other circumstances respecting the mode in which the letter was conveyed to England, and the time it had remained there, were material and ought to have been communicated, and that their suppression vitiated the policy; and several underwriters were called, who deposed that, in their opinion, the whole of the letter ought to have been communicated, and that the parts suppressed were material. The evidence was objected to, but admitted as the evidence of experts. "Lord TENTERDEN said: "Several witnesses were examined, who stated that they thought the letter was material, but it has been contended that no such evidence ought to have been received. I know not how the materiality of any matter is to be ascertained but by the evidence of persons conversant with the subject-matter of the inquiry."

That a witness may give his opinion to the jury, as an expert, who is conservant with the subject of Insurance, whether particular facts if disclosed would make a difference as to the amount of premium, has been affirmed in many cases.[1] A difference of opinion undoubtedly exists on this question among judges. The opposite doctrine, however, to that last mentioned, is maintained by Lord Mansfield, as we have seen in the case of Carter *v.* Boehm, by Gibbs in Durrell *v.* Bederly, and by Lord Denman in Campbell *v.* Richards, Jef. In. Co. *v.* Cotheal, 7 Wend. 72. This may certainly be considered the limits of this kind of evidence.

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[1] Richards *v.* Murdock, 10 B. & C. 527; Berthon *v.* Longhman, 2 Star. N. P. 258; Durrell *v.* Bederly, Holt. N. P. C. 283; 3 Kent. Com. 284; Story, 1 Peters, 188; Duer on Representations, 190.

As a general rule, the opinions of a witness are not to be received in evidence merely because he may have had some experience, or greater opportunities of observation than others, unless they relate to matters of skill and science.[1] An expert can not give an opinion on the case where the facts are controverted, but counsel must put to him a hypothetical case, or a supposed state of facts, and ask the opinion of the witness upon these facts.[2] In the McNaghton case, one of the questions propounded to the learned judges by the House of Lords, was: "Can a medical man, conversant with the disease of insanity, who never saw the prisoner previous to the trial, but who was present during the whole trial and the examination of all the witnesses, be asked his opinion as to the state of the prisoner's mind at the time of the commission of the alleged crime, or his opinion whether the prisoner was conscious at the time of doing the act, that he was acting contrary to law; or whether he was laboring under any and what delusion at the time." To which question the judges, per, TINDAL, C. J., answer: "We state to your lordships that we think the medical man, under the circumstance supposed, can not in strictness be asked his opinion in the terms above stated, because each of those questions involves the determination of the truth of the facts deposed, to which it is for the jury to decide; and the questions are not mere questions upon matter of science, in which case such evidence is admissible. But when the facts are admitted or not disputed, and the question becomes substantially one of science only, it may be convenient to allow the question to be put without general form, *though* the *same can not* be insisted on as a matter of right." A witness therefore can not be asked to draw a conclusion of fact from the evidence of other witnesses, and then give an opinion to the jury upon these facts, if objected to

In the case of Sills *v.* Brown, 38 Eng. C. L. R. 245, the wit-

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[1] Robertson *v.* Stark, 15 N. H. 109.

[2] 1 Curtis, Ct. R. 1; 1 Chaud. Wis. R. 264; 2 Mich. 183; 38 Eng. Com. Law R. 245; McNaghton's case, 10 Clark & Fin. 210.

ness, a sea captain, was asked as a seaman, "whether, having heard the evidence in the cause, he thought the conduct of the captain of the brig was right or not." The court held the question could not be put.

Any witness may be asked his opinion as to whether a party at a certain time was drunk. It is not so much an opinion as a statement of a fact involving no medical or scientific knowledge.

An opinion of a witness, that certain articles in an account were necessary for A. B., a minor, is incompetent; he must state the facts as to the condition of A. B., and leave the inference to the jury.[1]

A land surveyor testified that he had run out the lines of lots surveyed by a former surveyor, and was familiar with his mode of marking corners, and then testified to certain marks upon certain alleged corners, as having been made by the former surveyor. Held, that his belief that the marks were those made by the former surveyor, was not evidence to be received by the jury as an expert, but was merely the testimony of a witness to a fact within his knowledge, and was to be credited by the jury only so far as they believe him able, from his personal knowledge, to identify the mark in question.[2]

It is well settled that where terms of art or trade are used in contracts, if there be any doubts as to the sense in which they are used or ought to be applied, resort is to be had to the opinions of professional men to ascertain the technical meaning attached to them by those conversant with their use.[3]

In an action upon a covenant of warranty of the soundness of a slave, the opinion of the physician who attended the deceased slave as to the character and derivation of his disease, and also the statement of the slave made to the physician and others, as to the symptoms and effects of his disease, are competent evidence.[4]

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[1] Merrit *v.* Leamen, 2 Selden, (N. Y.) 168.

[2] Barron *v.* Cobleigh, 11 N. H. 557.

[3] Reed *v.* Hobbs, 2 Scam. 297.

[4] Jones *v.* White, 11 Hamph. 268.

When a witness in his deposition stated that he attended a certain negro "as a physician," it was held that this evidence was sufficient that he was a physician, to warrant the admission of his opinions in evidence respecting the disease of the negro.[1]

Physicians alone are permitted to give their opinion as to the existence, nature or extent of disease in any person. As, when it is alleged that a slave was unsound at the time of her sale, in consequence of her having the venereal disease, evidence of physicans is competent to show, that the disease did not at the time prevail in the neighborhood in which she was sold, but did prevail in the town, about seventy-five miles distant, to which she was taken by the purchaser soon after the sale.[2]

The opinion of a teamster, though experienced, respecting the value of horses, harness and wagons which are familiar to him, is not evidence, it not being a matter of science or skill.[3] Where parties had contracted for repairs on a vessel to be completed by a certain time, and the job not being done until after the time specified, it has been held, that witnesses who were not ship carpenters, but who were ship masters and workmen, were competent witnesses to show the difference between the value of the vessel thus repaired, and what it would have been worth had the vessel been repaired in due time.[4] But the opinions of witnesses as to the amount of damages a tenant has sustained by the deprivation of, or withdrawal of water from a tavern leased to him, are not admissible in evidence.[5] Opinion of bystanders, that a building would have been burned by a conflagration, if it had not been blown up to stay its spreading, is not admissible.[6] Opinions of witnesses as to the value of a well-broke setter dog, they being acquainted with the peculiar qualities of setters, and their value

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[1] Washington *v.* Cole, 6 Ala. 212.
[2] Lusk *v.* McDaniel, 13 Ird. 485.
[3] Robertson *v.* Stark, 15 N. H. 109.
[4] 10 Ird. 280.
[5] 4 Barb. Sup. Ct. R. 256; Norman *v.* Wells, 17 Wend. 136.
[6] Mayor of N. Y. *v.* Pentz, 24 Wend. 668.

in market, but not with the particular one in question, were held to be barely competent.[1] An officer in a bank, whose business it has been for many years to examine papers with the view of detecting alterations, errors and spurious signatures, may be asked his opinion as to the facts, whether alteration or error has been made in a certain paper.[2] It has also been held that where the signature in controversy and signature of the same party admitted to be genuine are before the court, experts may be called to give their opinion on comparing the former with the latter, whether the one controverted is genuine.[3] This crowds the old rule, requiring an acquaintance with the handwriting of the individual whose signature was to be proved by one having seen him write, or he must have corresponded with him, or, in some way became intimately acquainted with his handwriting. This rule is said to be from the Ecclesiastical Courts, and not adopted by the Common law. A witness may give an opinion as to whether an attachment existed between the parties, if he had opportunity of judging, from a series of instances, passing under his observation, which he could not well detail to a jury.[4]

"When such evidence is allowed, courts and referees must exercise a discretion and control as to the number of witnesses whose opinions will be heard, or such examinations will at times be nearly interminable. And that such a power exists in all judicial tribunals, admits, in my opinion, of as little doubt as that it was discreetly exercised in this instance."[5]

The preceding cases have been given, that the general scope and boundaries of this kind of evidence may be clearly understood.

The testimony of medical men as such, is purely that of experts. It is perhaps the most important of this class of evidence, and the physician or surgeon is very properly confined to

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[1] 23 Wend. 354.
[2] Pate *v.* People, 3 Gilman, 644.
[3] Hick *v.* Persons, 19 Ohio, 426.
[4] McKee *v.* Nelson, 4 Cowen, 355.
[5] Sizes *v.* Burt, 4 Denio, 428.

the science and learning of his profession when upon the stand as a professional witness. A party can not ask the professional witness his opinion upon any matter except one of skill and science. In the case of the People *v.* Bodine,[1] it appeared in evidence, that the dwelling house occupied by the deceased had been discovered to be on fire; that after the fire was extinguished, her dead body was discovered amid the rubbish, in one corner of the kitchen where her bed had stood, and where she had been accustomed to sleep; that the fire had been in that part of the house, and that a hole had been burned through the floor in that corner of the room, and that the fire had extended up the side walls of the room, had consumed the bed and bedding, and partly destroyed the bedstead; that the heap of rubbish among which the body had been found, consisted of bricks and mortar from the wall,—of partially destroyed pumpkins and onions, which had been kept under the bed,—of the bedstead and of the cinders from the bed, bedding and other articles which had been entirely consumed; that several physicians had made a *post mortem* examination of the body, and had given it as their opinion that the body had been dead before it had been subjected to the action of fire, for the reason among others, that portions of the body had been protected and had not suffered at all from the action of the fire, which could not have happened unless the body had lain perfectly still during the continuance of the fire. Upon the cross-examination of one of these physicians, the counsel for the prisoner asked the following question: "Would not almost any protection and stillness of the body be accounted for, on the supposition that the bed-cords on the back of the bed were burned off and the body let down, and that then the bed had fallen upon it before life was entirely extinct?" which question was objected to by the counsel for the prosecution and excluded by the court, and exception was taken by the counsel for the prisoner and carried to the Supreme Court. That court held: "The question

[1] 1 Denio, 288.

put to one of the physicians on his cross-examination by the prisoner's counsel, was, in my opinion, correctly overruled. This witness and other physicians had made a post mortem examination of the person alleged to have been murdered, and they gave it as their opinion, that the death had preceded the action of fire on the body. This opinion, as is stated in the bill of exceptions, was founded on the reason, among others, that portions of the body which had been protected by covering upon them, 'had not suffered at all from the action of the fire.'

These physicians reasoned as other men would, that the body of a living person could hardly remain quiet under the action of fire, and that its convulsed and violent movements would be apt to displace any covering which might be upon different parts of it; and that to suppose life, in this instance, had been destroyed by the fire, was wholly inconsistent with the condition of the body as found, certain parts of it protected by covering not having been at all affected by the fire. Hence the opinion which was expressed, that death must have preceded the fire, and was not caused by it.

But this was, in no proper sense, a question of professional skill or science. An unlearned man of sense would have reasoned as the physicians did. Having ascertained that certain parts of the body which were protected by what had casually fallen upon them, were not affected by the fire, although most of the body was consumed by it, he would have inferred, as they did, that death preceded the fire. Nor was the particular question put to the witness, and which the court excluded, one of skill or science, or which should have been allowed to be answered on that principle. It was, beside, merely speculative and hypothetical, based on successive suppositions, which, it is not too much to say, were in the highest degree improbable. Counsel were of course at liberty to argue in this manner to the jury, and they would judge how far the explanation thus attempted to be given, was satisfactory to their minds; but it was not a subject which science or the skill of a physician could better solve than the good sense of an unlearned jury."

As in the case of competent knowledge, or the ordinary knowledge required at the hand of the surgeon and physician, so with the expert, as to what degree of knowledge will constitute him an expert. The means of obtaining the special knowledge in different locations, being different, the standard of qualification required by the court is also different. That degree of information that may qualify a physician to give evidence as an expert in an alleged case of poisoning by strychnine, in the State of Iowa, would be deemed altogether insufficient in the city of New York.

This very point has been passed upon by the Supreme Court of Iowa, in a case just reported.

THE STATE OF IOWA *v.* HINKLE, 6 Iowa R. 380.

In this case, the defendant was charged with the murder of his wife, committed by means of strychnine. The State introduced two witnesses, Drs. S—— and F——, as experts, inexperienced in chemical analysis, to testify as to the tests applied in the chemical analysis made of the stomach of the deceased, and of the tests usually applied for detecting the existence of poison in such cases. The court held:

WRIGHT, C. J.—Two physicians were called, and testified as to the tests applied in the chemical analysis made of the stomach of the deceased, and also of the tests usually applied for detecting the existence of poison in such cases. Both of them testified that they were practicing physicians. One of them stated that he was not a professional chemist, but understood some of the practical details of chemistry,—that portion, at least, which pertained to his profession,—that he had no practical experience in the analysis of poisons, until, in connection with Dr. Francis, he analyzed the contents of the stomach of the deceased; that since that time he had conducted experiments upon a small scale; and that he was previously acquainted with the means of detecting poisons, and had since, had some experience in that way. The other testified that he was not a practical chemist; that he did not follow the science as a profession; that he understood the chemical

tests by which the presence of strychnine can be detected; that he professed to understand the principles of chemistry as laid down in the books on that science; that he never experimented, with a view to detect strychnine by chemical tests; that he had seen experiments by professors of chemistry; and that there was one test much relied on, the trial of which he had witnessed. Defendant objected to these witnesses as incompetent, and now urge that they did not show themselves possessed of the requisite professional skill.

We think they were competent witnesses. It is, of course, desirable that great caution should be exercised in conducting experiments of this character, and that the most skillful professional aid should be secured. If conducted, however, by such as have not had experience, or by those who, though not practical chemists, give their opinions from knowledge derived from the books upon that science, such opinion would be entitled to less weight than if given by a practical chemist,—he who bases his conclusions upon experience as well as books. The means of knowledge are proper to be considered by the jury, and they should give or withhold credence in the opinion given, as they may believe the expert qualified to speak more or less intelligently and understandingly. But to say that none shall be permitted to give their opinions, except those of the highest professional skill, or those who have given their lives to chemical experiments, would, in this country at least, render it impossible, in most cases, to find the requisite skill and ability. This seems to have been the view taken of the question by the court below. The jury was very fully and particularly instructed as to the weight to be given to this character of testimony, and the considerations which should enter into their deliberations in weighing the same. We can not conceive how the jury could, under the circumstances, have been misled, or the defendant prejudiced.

☞ *See Appendix, page 588, for full Notes on this Chapter.*

CHAPTER XIX.

HISTORY OF MEDICAL EVIDENCE.

The importance of medical testimony in elucidating and fixing the character and extent of crime and the degree of its punishment, is very properly becoming every year more apparent and better understood. Although medicine itself is as old as history, the learning of that science, in its application to jurisprudence, is of but very recent date. Not until the time of the Emperor Charles the Fifth, of Germany, was there ever a recognition, publicly, of the value of Medical Evidence. In the "Caroline Code," framed at Ratisbon, in 1532, it was ordained, that the opinion of medical men should be received in cases of death by violent or unnatural means, where there was the least suspicion of criminal agencies having been used.

Thus from a civilian,—one of the greatest, it is true,—first sprang the idea, or at least the application of the idea of using the researches of the anatomist, physiologist, the accoucheur and the chemist, in explaining the causes of disease and death in ununusual cases, thus detecting the criminal, guilty of crimes that had before been perpetrated with impunity.

The publication of this code encouraged the members of the medical profession to more fully qualify themselves for the new duties thus recognized and imposed. The result was, that many books appeared very soon upon the subject of Medical Jurisprudence, and the importance of Medical Evidence.[1]

At first the surgeon only was permitted to give testimony in

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[1] 1 Paris, Med. Jurisprudence, page 10.

courts of justice. Thus, in 1606, Henry the Fourth authorized his first physician to appoint two *surgeons* in every city and town, whose duty it should be to examine all wounded or murdered persons, and report the facts in the case; and as late as 1667 no such report was valid, unless at least one surgeon sanctioned it. In 1692 it was admitted that physicians also knew something about medical matters that might be auxiliary to jurispridence, and by law they were permitted to give testimony in the same case with surgeons.

During the eighteenth century a large number of able writers devoted their lives to Medico-legal investigations, in Italy, France and Germany. The Germans have especially excelled in this department, and furnished extensive and important contributions to its stores of learning, from Henke and Gmelin to Wagner and Casper. The proverbial patient German research, is not perhaps better illustrated in their theology and metaphysics, than in their investigations in, and contributions to Medical Jurisprudence.

A list of distinguished names also adorn the history of the science in France, headed by the celebrated Ambrose Pare, and culminating in the distinguished Orfila.

England has not been noted for her writers on Medical Jurisprudence until quite recently. Dr. Farr, in about the year 1790, discussed the subject in a little work on the "Elements of Forensic Medicine." Dr. John Gordon Smith did much to advance the science. He wrote an excellent treatise on Medical Evidence generally, without however being very close or definite, the only work, perhaps, ever published exclusively on that subject. It has not been republished in this country, and is out of print. Recently the very able works of Dr Guy, Mr. Taylor and Christison, abundantly atone for past delinquencies in this field.

In the United States the distinguished Dr. Rush, of Philadelphia, ever awake to the advancement of his favorite science in all its departments, called the attention of his countrymen and professional brethren to the importance of this subject in an introductory lecture in the University of Pennsylvania, in 1810. In

the conclusion of that lecture, he says: "To animate you to apply to the study all of the subjects enumerated in the introduction to our lecture, I beg you to recollect the extent of the services you will thereby be enabled to render to individuals and the public; fraud and violence may be detected and punished; unmerited infamy and death may be prevented; the widow and the orphan may be saved from ruin; virgin purity and innocence may be vindicated; conjugal harmony and happiness may be restored; unjust and oppressive demands upon the service of your fellow citizens may be obviated; and the sources of public misery in epidemic diseases may be removed by your testimony in courts of justice."

The importance of medical knowledge in legal investigations, from the time of Dr. Rush until the present, has gradually, but steadily been increasing, till it is now acknowledged by the legal profession and the public. In 1823, Dr. T. Romeyn Beck, published the first edition of his Medical Jurisprudence. It was the first American work worthy the subject. Favorably received by both the medical and legal professions from the outset, it has grown from a moderate sized work to two stout volumes. It is a compendium or encyclopedia of information of all kinds connected with the subject of Medical Jurisprudence. In patient research it can not be surpassed, and in extent of detail it is complete, if not even burdensome.

Dr. I. Ray, about the year 1850, published his work on Insanity. It at once became a standard work on the subject. In originality of matter, and as the embodiment of extensive personal observation and experience; in the compactness of argument, and beauty of style, the work is unequalled, notwithstanding some of his observations and theories may be open to criticism.

The subject of insanity is surrounded with almost insuperable difficulties, but in the hands of this great master, it becomes more intelligible, and the claims of the poor unfortunate maniac are earnestly and eloquently advocated and cared for.

Prof. Dean, of Albany, has published a very thorough and

practical work on the subject of forensic medicine. The subject, in his hands, is as much condensed as possible, making the volume of convenient size.

The latest work upon the subject, and in some respects the best, is the able compilation of Wharton and Stille.

Notwithstanding the existence of all these valuable treatises on Medical Jurisprudence, it must be admitted the subject is still in its infancy. So far as the practical application of its principles is concerned, it has not yet assumed the high and desirable position of a specialty in our colleges of law and medicine, which its importance demands. Eminent physicians, like Dr. Reese, of New York, are advocating more prominence for these studies in our colleges. To the medical student, it is as much a necessity as chemistry or anatomy. To the lawyer, it is an important part of the great subject of evidence. It is desirable that some leading university will soon establish a chair devoted to the subject. The Fox ministry of 1806 were ridiculed and reviled, because they appointed the celebrated Dr. Duncan to the first professorship of forensic medicine in the British University. But now, no professorship is more honorable or more highly valued in Great Britain than that of Medical Jurisprudence. New truths and new application of old ones always meet with opposition; and that opposition not unfrequently calls to its aid ridicule. This has been encountered and overcome.

One important cause of the change of opinion, or rather the recent appreciation of medical testimony in Medico-legal questions is, that it has been so often demonstrated, that without it many of the most startling and dangerous crimes would go undiscovered and unpunished.

Questions of identity in cases of violent death, and when there is exhumation, can seldom be settled satisfactorily without the aid of the medical man. His peculiar knowledge in regard to the peculiarity of sex, the facilities his scientific knowledge affords for accounting for a change in the color of the hair, and the probable stature of the body, when but part of the body is found,

render this knowledge indispensable in such cases. The physician's knowledge of the peculiarities of formation in individuals, learned in his treatment of them, gives him an advantage of knowledge over the unprofessional. Thus in the year 1814, Dupuytren identified the person of a murdered man, by observing the malformation of the hip joint which he had been called upon before to examine. The body of the unfortunate Maria Martin was identified eleven months after her death by the absence of certain teeth from the upper and lower jaw, and by adhesions of the pleura, and other signs of inflammation occurring before death, it being proved by medical attendants that she had suffered from inflammation of the chest shortly before her mysterious disappearance. The body of Dr. Parkman, murdered by Prof. Webster, was identified in part by the dentist who had taken a cast of his lower jaw some years before his death, which cast corresponded exactly with the fragments found in the stove where the head had been consumed. The exact stature of the remains of Dr. Parkman were also determined by medical men, to a certainty, notwithstanding part of the lower extremities were completely destroyed. The body of Charles the First was identified when exhumed, many years after his death, by the smooth corresponding surfaces of the fourth cervical vertebra, showing that they had been separated by a heavy, sharp instrument. Orfila claims that the medical man can, with his table, take any one of the cylindrical bones of the body and determine almost exactly the highth of the body to which the bone belongs. Give him the length of the femur, or the humerus especially, and he will give the stature of the body.

The physician will determine the age of a deceased person with considerable certainty, from the process of ossification, especially during the early and latter periods of life. In extreme malformation, the sex can only be determined by the medical man.

The ability of medical men to determine age and sex when all other means fail, and thereby insure the punishment of crime, is illustrated in a case reported in France. In 1821, a woman

living in the city of Paris, disappeared under suspicious circumstances. Several persons were suspected of having killed her. They were arrested and tried, but for want of evidence were set at liberty. Some eleven years afterward, a well-directed research was made by Orfila, Mark, Barrael, Chevallier and Boys de Soury, on the remains of a person buried in a garden, by which evidence was brought out to convict the parties originally suspected.

The points the investigating committee settled to the satisfaction of the court and all others, were: that these bones, which had been buried eleven years, were: 1st. The bones of a *human* skeleton; 2d. That the skeleton was that of a female; 3d. That the female had attained the age of from sixty to seventy years; 4th. That the stature was about four feet eight or nine inches; 5th. That the hair of the female, which was of a bright blonde color in youth, was mixed with gray at the time of her death; 6th. That the hands were small; 7th. That during life, the bones had never suffered any injury; 8th. That this woman died of strangulation, and that the act was, to all appearances, homicidal; 9th. That the body must have lain several years in the earth.

Thus was *science* vindicated, and justice satisfied by the punishment of the guilty, by the evidence of these scientific men, after eleven years had thrown oblivion over all the circumstances connected with the immediate death. Many cases are reported where medical testimony has exculpated and relieved from danger and death the innocent wrongfully accused and condemned.

A Frenchman, by the name of Montbailly, and his wife, were tried by the Superior Court of Arras, and condemned to be broken on the wheel, and Montbailly was actually executed in that way, for the murder of a widow Montbailly, aged sixty. The wife claimed delay on account of her pregnancy, which was granted. In the mean time, the celebrated physician, Louis, was consulted in regard to the matter, and the result of a long and careful investigation was, that the Montbaillys were probably innocent, as there was no sufficient evidence, from the appearance of the body

after death, of homicide. The woman was saved and set at liberty, and the memory of Montbailly exonerated.

A case is reported in the London Lancet, where one brother was supposed to have killed another brother, and the crime was, after many years, thought to be discovered by the accidental discovery of the bones. They were examined by a surgeon, and found to be those of an *aged female.*

Thomas Bowenman was about being condemned, in 1800, in England, for the murder of a bastard child, by pushing an awl into its head. The body was disinterred and examined by the coroner, when the identical hole was found made by the awl, as the witness had stated. Mr. Sheldon, a surgeon of Exeter, having heard of the case, volunteered and attended the grand jury. He examined the skull, and was satisfied the hole was a *natural foramen,* through which a vein passed. He satisfied the jury of the truth of this, by pointing out the enamel around the hole, which could not have been there if made by the awl. He exhibited several skulls, all having similar perforations, and each hole having a small channel, and the rim or edge of the hole being smooth and polished.

The noted Eugene Aram, who serves as one of Bulwer's heroes, was condemned to death for the murder of Clarke, after a very able defense, on the testimony of Mr. Lacock, a celebrated surgeon. He said in evidence, that the fracture in the skull could not be the result of natural decay, and that it was not a recent fracture by the instrument with which it had been disinterred, but was of many years standing. The skull had been buried thirteen years. Though convicted, his guilt was doubted by many, yet, before execution, he confessed it, thus completely justifying the conclusions of the medical witness.

In the year of 1835, in Bordeaux, a son was apprehended for the murder of his father, and was only saved by medical testimony when all the circumstances of the case were against him. The pistol with which the old man was killed, was found still in his hand, although the upper part of his head had been blown

off, and in a position where the force of gravity would have taken it to the floor. It was considered probable that the son had thus placed the pistol in order to give the idea of suicide. There never had been any difficulty, as was known, between the parties, though there was some property involved that would descend to the son. The old man was subject to fits of insanity; still the position of the pistol was against the son. The medical testimony rebutted the idea, by stating what is well known to anatomists and physiologists, that the *contraction* of the fingers often remains for a considerable length of time after a sudden, violent death, whereas, in this case especially, the weapon was firmly held. It was, therefore, pronounced a case of suicide, and the defendant discharged.

This class of cases having impressed upon the unprofessional, that there can not be more important evidence, — evidence fraught with greater consequences to life, liberty, reputation and property,—all the dearest interests of man,—than that of the medical witness, and that his position is important.

Medical evidence has thus forced itself upon the attention of society and the courts, until its claims are about to be realized.

CHAPTER XX.

THE IMPORTANCE OF MEDICAL EVIDENCE.

"CUILIBET IN SUA ARTE PERITO EST CREDENDUM." Co. Litt. 125.

No person, whether professional or unprofessional, educated or otherwise, is properly qualified to appear in a court of justice as a witness, with credit to himself or justice to the cause he would elucidate, without a general knowledge of the duties, rights and privileges that surround him while occupying so important a position.

While but little, comparatively, is expected of timid ignorance and weak and trembling inexperience; much, very much, is rightfully required and looked for from the learned and public man. If the former are able to command presence of mind and language sufficiently intelligible to be understood, it is as much or more than is expected of them. Not so, however, with the man of public and professional pretensions. He is measured, properly, by a different and more exact and rigid rule. If he fails to furnish good measure, he will most certainly leave the stand disgraced, and his friends chagrined and disappointed.

There is no situation, perhaps, where the professional medical man can be placed, wherein he will be subjected to a more thorough, rigid and severe criticism, as to what he says, how he says it, and the reason why he says it, with all the influences that may have a bearing on what he says, than as a medical witness in a court of justice, under the eagle eye of an able judge, the severe and interested scrutiny of counsel, and the candid, impartial observation of a jury. This is not only forcibly true as to the position of the medical witness, but is almost savagely

so. On the one hand, the party by and for whom he is called, seems to expect that he will say nothing that will damage him,—that the weight of his character, professional reputation, position, influence,—every thing, will all go to favor his interests; while on the other hand, this very weight of character, influence, etc., will arouse the resisting energies of the opposite party, to contradict, break down, and destroy the effect of such testimony. An important witness thus placed between two fires, as it were,—a conspicuous mark as he is,—will do well if he comes off without being badly wounded.

One important cause of much of the unjust reproach and odium attaching to the medical profession, and why empiricism and quackery flourish, is, that the peculiar province and duties of the practitioner of medicine lie out of sight,—hidden from the world at large. Much that is claimed as having been accomplished, can not be seen and tested by a discerning public. Credit is often given, therefore, and censure meted out, where they are not deserved. The public have no means of determining just what has transpired or been done within the private sanctity of the bed-chamber.

The practice of law in this respect is the very opposite of medicine. In that profession all the duties of the attorney are exposed to the full gaze of the world,—all his acts are liable to be overhauled, discussed and exposed by a court which has not only the right to reprimand him if guilty of quackery or dishonesty, but the power to throw him over the bar. Then the bar of public opinion is more to be dreaded by him than that of his profession, if possible, because from the publicity of all his acts, he is very soon assigned by the public his proper position, both for honesty and for ability. Had the medical profession this ordeal through which to pass, and a tribunal to which it was thus responsible, and by which its members could be called to an account, charlatanism would soon be driven out of the profession and compelled to band with pettifoggers.

The value of this public position, as a medical witness, there-

fore,—to one who is equal to the duties thus imposed—is beyond estimation. It is, in fact, about the only chance the medical man has of vindicating a noble science, and a noble manhood. To him alone the court and jury look for a solution of the dark and difficult problems of a scientific and medicinal nature, which they are called upon to examine and pass upon, and of which they have but little or no knowledge. These questions are vast and unlimited in their range, and many of them soundless in their depth. Whether the question under investigation has reference to the character of a disease, or whether it is not simulated; whether it is one of the thousand questions having a sexual bearing; or does it relate to the sanitary condition of society or of towns; does it relate to the great matter of life insurance, survivorship, legitimacy, age, identity, the severity of punishment, at home or at school, the health of a nation or the value of a slave; or is it whether death is real or only apparent;—if real, was it from natural causes or otherwise;—did the cause of death proceed from the deceased, or another;—if from another, was it a homicide or an accidental death, and what were the agents used and the circumstances attending their application; if poison is the agent, of what kind, and to what extent did it contribute to the death;—what natural disease is attended with similar symptoms; or is it one of the infinite, mysterious, and most difficult of all problems,—those relating to the mind;—in either and all of these cases, and in many others, upon the medical witness almost alone rests the responsibility of a solution.

There can not transpire a business transaction of any kind, an act civil or criminal, of which courts have jurisdiction, but what may involve some medical question, demanding the attendance and testimony of the medical witness; because the mind as an element, must, of course, enter into all accountable acts, whether of a criminal or civil bearing; and whether the act is rational, is a question in the main for the physician.

Thus, the highest interest of individuals, as well as of whole families, and even the safety of society itself, depend constantly

and necessarily upon medical testimony. Not only questions of property and life, but those which are dearer and of more value than property or life,—*Character* and *Reputation*,—are in the hands of the medical witness.

No class of witnesses dispose by their testimony of larger amounts of money than this class. The greatest fortunes ever collected together by financial ability, have been distributed by medical men upon the witness stand, in contests over the validity of wills. In the celebrated Parrish will case, decided in New York city, December 10, 1857, by Judge Bradford, a large fortune was diverted from the channel indicated by the testator, by medical testimony. The law books are full of illustrations of this fact.

If such is the grand province of the medical witness, and such the importance of his testimony, how and why is it that he does not strive harder and more successfully to come up to its requirements, and completely occupy the extensive field belonging thus exclusively to him? And why are not members of the bar more ready to admit the great significance and importance of this kind of evidence, and treat it with that consideration and respect its merits demand?

Beside the importance of Medical Evidence to the correct administration of Civil and Criminal Jurisprudence, the public position of the medical man as a witness,—a position so much dreaded by many,—may be to him personally of significant importance. Society, with her hundred eyes, is looking at him, and listening to what he says. Those who rely upon what the medical man says as authority on medical matters, in their families, await with no less interest, when they listen to him in the court room; but with almost the certain assurance that in the latter case the true value of such confidence will be determined. The physician's influence will be either much stronger than before, or it will be annihilated. While ignorance and deception, like death, may be triumphant in the sick room without being called to an account or cross-examined, in open court they can find no refuge or protection, but will most certainly be exposed.

The physician's life is not always seen, though it may be felt. He has, for this reason, comparatively few opportunities to distinguish himself publicly. The lawyer, on the other hand, has many. As a witness, the medical man has an opportunity to show to the world just what his position as a thinker is; just what the extent of his knowledge, and in what manner he handles and applies it;—how he reasons upon the facts in his possession, in making up the conclusions he gives to the jury as opinions, etc. In short, on the witness stand, his weight is accurately taken, and his proper place assigned. Illustrations of this are not uncommon.

Prof. J. P. K——, whose general knowledge and great acquirements as a Naturalist, render him worthy to be called the Humboldt of the West, was first marked as a physician of close thought and of superior powers, upon the witness stand. Mr. W——, a celebrated lawyer, of Cincinnati, being one of the counsel in the case, saw at once, from the cool, clear, and logical manner in which he deposed,—defending and fortifying his points fully, by the correctness of the reasoning that accompanied them,—that the witness was competent to fill a Professor's Chair, and immediately on his return to Cincinnati, called him to that position, in the Ohio Medical College, of which Mr. W—— was a leading trustee. Prof. K—— was at the time a country physician, and generally unknown. The ability of the witness, and the judgment of the lawyer have been amply illustrated and confirmed by the long and distinguished professional life, in the higher walks of the profession and its sister sciences, of the distinguished professor.

A distinguished living politician, now the popular governor of a great Western State, a few years ago, was practicing medicine amid the fogs and fevers of the Mississippi valley, in obscurity and poverty; when he was brought into prominent notice, and his talents admitted, nearly in the same way as was Prof. K——. Thus, when the opportunity presented itself, as it always will, they were found ready and able to improve it.

True greatness will always be acknowledged sooner or later. Sometimes it is late, because an opportunity is wanting for its conspicuous development. During a lifetime, however, that opportunity will occur. To the physician, as to all others, if he is qualified for his duties,—truly representing his noble profession,—if he possesses the real elements of solid knowledge and worth,—there is a time when these qualifications will be proclaimed and acknowledged.

Let every member of the profession of medicine, who would defend its claims to honor and usefulness, and win for himself a distinguished position in its ranks, and in the world, prepare himself well and thoroughly to mount upon the witness stand with a firm, elastic step, feeling an assurance that it is the most favorable and distinguished position he can occupy as a representative of his profession or of his own acquirements.

To successfully fulfill the expectation of friends,—to vindicate an honorable profession from unjust reproach,—to render the malice or opposition of enemies and opponents harmless,—to sustain reputation and self respect, and above all, to vindicate truth, by contributing to the ends of justice; the professional medical witness when he appears upon the stand, must understand well the general rules of evidence,—without their detail,—that govern him, and like all other witnesses who appear as experts, he must also understand thoroughly the specialty upon which he is called to express an opinion.

Without this knowledge of the general rules of law that bear upon him as a witness, he is constantly liable to interruption and reproof, which always embarrass the witness, and neutralize the effect of his testimony. With that fair knowledge, however, which any intelligent man may obtain of the general principles of evidence bearing upon him, a great and constant source of irritation is avoided, and the protection and respect of the court and counsel secured. Without it, though intelligent in other respects, discomfiture, disgrace and chagrin are almost inevitable;—but, possessing this knowledge of his rights and duties as a witness,

and a clear and thorough knowledge of the special matter he is supposed to represent and understand better than others, there is no position in which he can be placed, more favorable to a rich harvest of honor, reputation and future success.

But above all these considerations, the great cause of justice, whether in criminal or civil cases, demands, at the hands of the professional medical witness, a clear explanation and elucidation of the matter in issue, if belonging to his field, irrespective of the opinions of court, jury, attorneys, society, or the result.

Any person may be a common witness when there is no legal disability, and testify as to facts, and if there is a willful misrepresentation or a mistaken statement, it may be corrected by others; this is not so easily done where the point in issue involves scientific knowledge. In most communities, outside of large cities, the solution of this class of problems depends upon a very few, if indeed, upon more than two or three. As the medical and surgical man is the guardian of the people's health and lives, in his usual every-day business, so is he in another equally important sense, the protector of the community,—as well as of those indicted for, or charged innocently with crime,—in the great field of Criminal Jurisprudence, when the subject relates to the momentous questions of life, health or death; subjects, around which cluster a multitude of questions to be passed upon and settled alone in courts of justice, on the testimony of medical and surgical witnesses.

In homicide or in the contests over the validity of wills, insanity and imbecility play an important part. There is scarcely a case of homicide, where the evidences of guilt is overwhelming, that the defense made for the prisoner is not that of insanity. If a man happens to die, possessed of religion enough to make a fair, charitable distribution of the surplus of his property, for the purpose of alleviating some of the hard paths and fortunes of life, or for affording greater facilities for the education of the indigent or friendless; then most assuredly he is imbecile or insane.

Thus this special and magnificent, yet dark and most difficult of

all studies, insanity; in some of its various forms, is constantly before the courts, and the opinions of medical men constantly needed and depended upon for its solution. To guide the court safely at this point, the witness must not only understand the basis or the machinery of mind,—anatomy and physiology,—but he must be well versed in the ethereal world of metaphysics or psychology in its widest sense.

It is a constant source of complaint, on the part of writers on Medical Jurisprudence, and indeed, of elementary law writers of high standing, and also of the medical witness himself, that medical testimony is not appreciated or treated by the legal profession with the consideration its character and value warrant. There is too much ground for these complaints, especially in the case of the medical witness. He does not always receive, at the hands of the members of the bar, that courtesy and candor to which he is entitled. Yet it is not to be denied, that the "doctors" who often intrude themselves upon the court and bar, as the representatives of the medical profession, do, by their ignorance, self-conceit, and disgusting assurance and complacency, present so perfect an embodiment of egotism and imbecility, that every man of common sense is at once disgusted with the exhibition of groundless pretension; and the worthy members of a noble profession have to bear unjustly, the odium and reproach thus wrongfully incurred and heaped upon it, through the impudence, imposition and ignorance, of knaves and fools.

The court and bar should remember, that a profession or science that can live, flourish and bless mankind, notwithstanding the loathful and deadly influence of charlatans,—a fungous growth upon the body of the profession, like a cancer upon the breast of womanhood, constantly eating out its life and presenting a tormenting and disgusting ulcer,—must have great vitality and tenacity of life, worthy of their respect and admiration.

What other profession than the medical, could have carried for so long a time such "a body of death," and still survive, apparently more strong and vigorous than ever from century to

century? No sooner do the recuperative powers of the profession throw off, by the process of sloughing, one fungous growth, than another springs up, to be in turn thrown off; yet the science of medicine lives on. Its history commenced and runs parallel with the human race; and we may hope that the day is not far distant when the profession of medicine will be completely disenthralled and rejuvenated from the great difficulties with which it has always had to contend, and without let or hinderance, pursue its glorious mission of lengthening life, relieving pain, and cheering and blessing mankind. These peculiar difficulties and troubles, connected with the medical profession, attorneys should bear in mind when they would censure that profession.

But to take the case as we find it, the only chance for the medical witness in court, is to present clearly, true science, and as far as possible the reasons for the opinions given; and his testimony will be understood to mean something, and he will, at least, be respected by the court and bar.

Strength of character, candor, intelligence, manly diffidence on questions that science can not yet fathom, characterize the true medical man, who, by hard labor and severe study, has comprehended his science so far as possible. It gives to him a proper confidence and self-reliance; enabling the court and attorneys to distinguish the true representative of science, from the impostor, who will be glad to retreat to an oblivion that can alone shield him from the consequences of his guilt and presumption. Indeed, this is true to-day; the true medical man, when he comes upon the stand, though there may be much prejudice against him at the outset, will soon disarm that prejudice, and all that he says will be taken as evidence; while the counterfeit will be as surely nailed to the counter.

No man should presume to come upon the stand to enlighten a court in a difficult case, unless he is able to do so. Such a one, though called, and full of confidence, will go off with credit only, by frankly admitting that he can not throw light upon the subject. He then has the reputation of being an honest man,

which he is not, if he will pretend to palm off his ignorance upon a court and jury for true science.

That witness who undertakes to elucidate what he can only render more obscure, can not and ought not receive any favor at the hands of the court or bar. The medical witness sometimes complains that he is compelled to appear as a witness, and then must submit to abuse, and perhaps ridicule. This may sometimes happen, but it is seldom that the deliberate, candid and intelligent witness will be thus used,—certainly not by a court. No witness is ever compelled to appear and testify to *what he don't know*. He may be compelled to *attend* at court in obedience to a subpœna; but if he testifies, or attempts to, upon a subject requiring *opinions*, upon which he has no well-settled and well-defined ideas, fixed and definite, it is his own fault, for which he alone is to blame; for no one but himself can know so well as he,—until he has exposed himself,—how unfit he is for the occasion.

It is a very great mistake under which some medical witnesses labor, that because of the simple fact that they are called "doctors," they can appear upon the witness stand and decide those momentous questions to which we have referred. It will not be tolerated. However anxious an incompetent witness may be, to appear learned, and however hard he may labor to show it, he will ever find it uphill business to make the court and counsel believe that he is really so. To appear really learned, he must be able to make the subject upon which he gives an opinion, clear, and to give satisfactory reasons for his opinion. He must be not only a thinker himself, but must satisfy others that he is master of the subject. Take almost any one of the important scientific questions upon which the professional witness is called to pass an opinion, and unless he has looked at the subject before, with a purpose to understand it,—comprehending its extent, weight and relations,—he will find it to have suddenly assumed an importance he has not before suspected, just at a time when the discovery will add to his confusion and chagrin. It is better

to make this discovery in the quiet stillness and security of solitary thought and study, than under the eye of a judge and the severe scrutiny of counsel.

A man, whether learned or not, whether in court or out of court, will talk clearly upon a subject he well understands, whether it is scientific or otherwise; but unless it is clear in his own mind, his account of it will be confused and unsatisfactory. No amount of windy pretension or technical verbosity, will help him out of the ridiculous position into which he has voluntarily and impudently placed himself, by pretending to do what he is wholly incompetent to accomplish. It is this profusion of disagreeable assurance, empty pretension, gassy reputation, wise looks and big words, that so often disgust the court and counsel, and bring disgrace upon those who are really high-minded, learned and candid.

William Hunter says: "To make a show, and appear learned and ingenious in natural knowledge, may flatter vanity; to know facts, to separate them from supposition, to arrange and connect them, to make them plain to ordinary capacities, and above all, to point out the useful applications, is, in my opinion, much more laudable, and shall be the object of my ambition."

When the matter at issue is of sufficient importance to command able counsel in conducting it, all false pretension on the part of the witness will be at once detected and exposed, whether professional or unprofessional.

CHAPTER XXI.

DUTIES AND RESPONSIBILITIES OF MEDICAL WITNESSES

This whole subject of Medical Evidence has been too much neglected by the medical profession at large. The witness stand should be the arena upon which the scientific man should gladly appear, as the public vindicator of justice; thereby defending and vindicating his own noble profession from the discredit brought upon it by the illiterate hangers-on, who claim to represent it, but do not any more truly, than does the miserable pettifogger truly represent the high-minded, intelligent and honorable lawyer.

He who studies well the office of the professional witness,—combining, as it does, the importance of the evidence, and the value of the position to the witness himself,—will be impressed with the magnitude of the consequences involved, and qualifications necessary for an easy and honorable, as well as pleasant discharge of its functions.

The works on Medical Jurisprudence must be read, studied and analyzed; a great deal will be found practically useless, but what is of real value must be treasured up under the light of a good judgment.

Nor in them does the medical witness find those directions he needs to prepare him for the vastly important duties of making up and giving opinions, that are to be received by a court and jury as facts, and that will warrant them in rendering a verdict or judgment upon such opinions.

Dr. C. B. Coventry, of Utica, New York, makes the following suggestions to the medical witness, in an able report to the American Medical Association, on the Medical Jurisprudence of Insanity: "If, however, he concludes to form an opinion and testify, there are certain rules and regulations which he should adopt, not only to give force to his testimony but for his own protection.

1. He should listen attentively to the testimony, as to all the facts in the case, and avail himself of every authentic means of forming a correct opinion.

2. He should studiously guard against being biased, either by popular clamor, or because he is called by one side rather than the other. He is to form his opinion exclusively from what appears in evidence, excluding, as far as possible, any previous prejudices, or what he may have seen in the papers, or heard from rumor.

3. The medical witness is not to take into consideration the influence which his testimony may have on the prisoner at the bar, or the case under consideration, if he is testifying as to facts. He states the facts as he understands them. If it is a matter of opinion, drawn from the facts, he should state it honestly; but, if he has doubts, he should express them.

4. The expert is called to testify as to the bearing of the testimony given, and though he may have his own doubts of the truth of the testimony, yet, if it stands unimpeached, he must receive it as true. It is not proper for him to call in question the testimony of another witness; at the same time, he is not required to say he believes him, but can say that the testimony of the witness or witnesses prove so and so, leaving the jury to judge of its credibility.

5. A medical witness should not assume the province of the jury; as, for instance, to say a particular wound was the cause of death; he should only state what would be the ordinary effect of such a wound; or, in a question of insanity, that the testimony given was an evidence, or was not an evidence of insanity.

6. The medical witness should have his mind fully prepared, before taking the stand, as to what he can testify to, and his reasons, if they are required. He should, in his testimony, avoid, as much as possible, the use of technical or professional terms, which the jury would not be likely to understand; but if unavoidable, then their meaning should be explained to the jury. In giving his testimony, he should keep cool and collected, and not permit himself to be irritated or confused by the counsel; and should avoid introducing any expression or opinion not immediately connected with the cause before the court."[1]

Though the medical witness may feel that he is sometimes too roughly handled by counsel, he should remember that the ablest and best judges and lawyers fully appreciate the difficulties and importance of his position.

Chief Justice Hornblower, on one occasion, said: "I consider the administration of Criminal law greatly indebted to medical men for the results of their valuable experience and professional discussions on the subject of insanity, and I believe those judges who carefully study the medical writers, and pay the most respectful, but discriminating attention to their scientific researches on the subject, will seldom, if ever, submit a case to a jury in such a way as to hazard the conviction of deranged men."[2]

Judge Capron, who so ably presided over the celebrated Huntington trial in the city of New York, said on that occasion: "Insanity, or mental alienation, has, from time immemorial, received the attention of the civil and criminal tribunals of all enlightened governments; able professors in all the learned professions and other profound scholars, have studied and examined the structures and functions of the human system, the laws and operations of mind, the relations of each to the other, and their mutual influence as a united organism, and have deducted results, and demonstrated their correctness by practical illus-

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[1] Pamphlet Report, p. 51.

[2] The Spencer Case, 1 Zab. 271.

trations, and logical deductions from established data; these results the courts have never failed to sanction as soon as their learned authors had agreed among themselves on the subject, and practical experience had attested their certainty."[1]

The medical witness, unlike the ordinary witness, does not, as a general thing, testify to matter-of-fact that comes within his own knowledge from the exercises of his senses, but he must give the deductions or inferences that are to be drawn from the facts as given by others,—that is to say, certain facts being given, he is to state the general principle which they indicate or involve, so far as it bears on the question at issue.

The facts upon which the medical witness may suddenly be called to give an opinion may be new to him; they may be drawn from any part of the wide domain peculiar to the scientific physician or surgeon; yet there may be no time for much reflection, or for a reference to authority. The counsel who manage the case, can take all the time necessary to familiarize themselves with all the points of evidence in the case, and it is their duty so to do; but the medical witness, upon whose testimony the case may turn, is brought upon the stand without any intimation, perhaps, as to the case, or the points upon which he is called. Now, this is quite different from being suddenly called into court to state a fact,—what one has seen or heard. All the common witness has to do, is simply to tell the truth; when he has done this, his highest duty is accomplished; but the medical witness must know the facts first, constituting the case upon which his opinion is desired; then he must apply to these facts the special knowledge he has of other scientific facts, established perhaps by many difficult experiments of different experimenters in various countries, and possibly, in different ages. Upon this chain of facts, one end, or the whole of which may lie completely beyond the reach and sight of the court and jury, his reasoning must be correct, or his opinion will be erroneous.

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[1] Trial of Huntington, 444.

The court and all parties concerned have a right to know upon just what evidence the jury found their verdict whether they can understand it or not; that if there is any thing that influences the verdict that is illegal, redress may be had by a new trial or otherwise.

After he has thus applied his scientific knowledge to the facts as stated by others, reaching a conclusion in his own mind, he is then to give the opinion to which he comes, to the jury or court. His duty, therefore, involves all that constitutes true logic and correct reasoning; while an ordinary memory will enable the common witness to state what he has seen.

The medical witness then, can only be prepared to do credit to himself, justice to the parties interested in the issue of the case upon which he is called, and honor to the profession he represents, by a thorough, well-ordered, well-digested knowledge and complete understanding of his profession, in all its extensive and intricate departments;—upon questions in any of which he may be called to give an opinion. In short, all the careful study, close observation, correct reasoning, clearness of understanding, precision of thought, necessary to carry the medical man safely through a life of active practice, without rendering himself liable to a charge of Malpractice or incompetency, is essential to constitute him a good, reliable expert.

The medical witness should never permit himself to be cunningly drawn into a discussion while upon the stand, either metaphysical or scientific; because it will be always carried on to disadvantage on his part. It is a discussion the court and jury can feel but little interest in, and the chances are that it will result to the discredit and discomfiture of the witness. The counsel being perfectly at home in the presence of the court, and the witness being placed in a new, and to him, perhaps, an embarrassing and awkward position, the former will, of course, have every advantage. The witness has done his duty when he has answered the question put to him, in as few words as will convey the sense he wishes to utter, with the proper explanation, if any

is needed. When he volunteers any thing beyond this, not directly bearing upon the question at issue, he does it at his peril, and prejudices his position. While the witness has an undoubted right to clothe his ideas in his own language, and explain fully just what he means, let him study brevity, for he has no right to go out of his way, even to argue or defend his position, unless called upon so to do. After he has given an opinion and the grounds for it, whether right or wrong, it should be left there.

The witness is entitled to the right,—and should insist upon it,—of having the question fairly and clearly stated. And he should not attempt an answer until he fully comprehends its bearing.

The author once examined Profs. Frank. H. Hamilton and Austin Flint, as medical witnesses; and this peculiar characteristic in their mode of discharging their duty as witnesses struck him forcibly. Very learned and deliberate men as they are, they would answer no question until it was so shaped as to mean something, and until fully comprehended by them. So it should be with any witness, who is an expert, desirous to enlighten the case, and wishing to preserve his own reputation, and that of his profession. He should be careful as to categorical answers to questions, unless he completely comprehends the effect of such direct answers, and the extent to which they reach. Yes, or no, positively fixes the answer, and afterward, it may be found difficult to qualify such answers. A witness may say yes, or no, to *facts* within his knowledge, but when the question involves several elements and various circumstances, as most professional questions do, those positive terms should be used cautiously and guardedly.

Hypothetical cases are sometimes troublesome to the witness, unless he is on his guard. A case may be supposed very nearly like the one upon which the evidence is to bear, and yet, lacking an essential element of the case at bar, but so nicely adjusted and balanced, that the jury may not see the difference. It is necessary, in many cases, for the counsel to hypothecate a case for the witness to give an opinion upon, which, if the witness perfectly

understands, he can properly answer; but there should be no confusion or contradiction in the terms or language used, and the answer can not be too closely confined to the supposed case.

The rule formerly was, in the language of the court,—C. J. SHAW presiding,—in the Roger's case; to put the question to the professional witness in this shape:[1] "If the symptoms and indications testified to by other witnesses are proved, and if *the jury* are satisfied of the truth of them, whether in his opinion the party was insane, and what the nature and character of that insanity; what state did they indicate, and what he would expect would be the conduct of such a person in any supposed circumstance." He is not, the court adds, to judge of the credit of the witnesses or of the truth of the facts thus testified to by others. It is for the jury to decide whether such facts are satisfactorily proved.

Under this state and form of the question, the medical witness passed upon the condition of the person being tried, in case the facts testified to by other witness were believed by the jury. In this case he must hear all the evidence that the jury hears; he must connect it; he must reject what does not bear upon the case; in fact, he discharges all the functions of a jury, except as to the credibility of the witnesses.

A different rule as to the form of the questions put to a professional witness,—especially in a case of insanity,—has been adopted since the trial of Rogers. In the case of the U. S. *v.* McGlue, 1 Curtis, Mr. Justice CURTIS said, that medical experts "were not allowed to give opinions in the case. It is not the province of the expert to draw inferences of fact from the evidence, but simply to declare his opinion on a known or hypothetical state of facts; and, therefore, the counsel on each side have put to the physicians such states of fact as they deem warranted by the evidence, and have taken their opinions thereon. If you consider any of these states of facts put to the medical

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[1] Commonwealth *v.* Rodgers, 7 Metcalf, 505.

witness are proved, then the opinions thereon are admissible evidence to be weighed by you, otherwise their opinions are not applicable to this case." This is also the view taken by the twelve judges in the McNaghton case.[1]

Although the old form of the question may possibly be still allowed in some of the States, the rule as laid down by Judge Curtis is the most correct and reasonable one. Here the witness does not pass upon any question belonging to the jury; but he determines whether or not a compact statement of supposed facts indicate a certain thing or condition, which deduction the jury are unable to make, though all the facts upon which the medical witness bases his opinion are before them. In this case the expert has not the responsibility of determining facts from the evidence,—the facts upon which he is giving an opinion are supposed to be true. If true, he says what they prove scientifically.[2]

All this, however, requires the cool exercise of judgment, the clear comprehension of science, and the lucid presentation of it to the court and jury. And, let the question be put in either way, on some difficult questions like that of insanity, this position and duty of the medical witness is an embarrassing and weighty one in the extreme. The symptoms that indicate insanity, often indicate other forms of disease when taken singly, and unless presented by the evidence, or in the hypothetical case collectively,—which is rarely the case,—the matter is left so obscure that the expert is necessarily puzzled as to the weight and place he shall give to the symptoms as presented. The witness can not safely answer the question affirmatively, because some of the symptoms indicate other diseases; and he can not possibly answer in the negative, because some of the symptoms only, or all, may indicate insanity, as well as other diseases. When dis-

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[1] 10 Clarke & Fin. 210.

[2] An able article against the new rule will be found in the July No., 1859, of the Boston Monthly Law Reporter, 127.

crepancies and contradictions exist in the evidence, or on the supposed case, as will often occur, the medical witness must be necessarily embarrassed,when asked to give an opinion upon such a basis. If the evidence conflicts, it can not, of course, all be true. If the question involves an impossibility, the proper course is to decline answering altogether, and ask that a definite hypothetical case be put.

No judicious judge will require any thing more than a fair and common-sense effort on the part of the medical witness; and it is to the court and not to counsel, that the witness is to look for guidance and protection in his effort to do his duty. If cool and collected, having the necessary judgment and qualification, the witness need entertain no fear of the court room. The counsel who improperly invades the domain of the witness, either to embarrass or abuse him, will receive no sympathy from a court or jury, *if the witness maintains a dignified manhood;* but, on the other hand, such counsel will most certainly prejudice his client's cause, and impair his influence with the jury and court.

There are several questions, in particular, that have produced great trouble in their solution to the medical witness,—questions very difficult in themselves, but rendered much more so by the skillful use made of them by shrewd counsel, for the purpose of overturning the effect of the medical witness' testimony.

Where is the inexperienced witness, who can look at the following question for the first time, in the presence of a court, jury and counsel, without confusion and dismay? "What is a wound?" or this, "What is meant by a wound *dangerous to life?*" or this, "What is meant by *grievous bodily harm?*"

These questions, and some others of the same character, as "What is insanity;" or, "What is a poison?" and the like, have driven many medical witnesses from the stand, broken down and disgraced, because they have foolishly attempted to do what is impossible. And yet it should not be so, and would not, if the medical witness understood the true nature and bearing of these questions, and their great difficulty of solution.

The witness will find it worse than in vain to attempt to give a consistent and authoritative definition of these terms. The books of medicine, surgery and law do not afford a positive definition to be relied upon.

Dunglison, in his Medical Dictionary, does not attempt a definition of the term "wound." Medical writers have, however, attempted a definition of a wound: one says, a wound is "a solution of continuity, from violence of any naturally continuous parts:" another has said, the true definition should be, "an external breach of continuity, directly occasioned by violence;" and again, the term has been defined "an injury to an organic texture, by mechanical or other violence."

It is claimed by some, that to constitute a wound, the *skin* should always be *broken* or injured, yet not regarding burns produced by heated metals or corrosive liquids, as wounds. Distinctions like these only tend to the embarrassment of the witness if he attempts to follow them, without facilitating the attainment of truth, or the advancement of criminal justice. Bouvier says: "This term, wound, in legal medicine, comprehends all lesions of the body, and in this differs from the meaning of the word when used in surgery. The latter only refers to a solution of continuity, while the former comprises not only these, but also every kind of accident, such as bruises, contusions, fractures, dislocations and the like."[1]

The present rule of law applicable to the term "wound" is, that *no injury constitutes a wound in law, unless the continuity of the skin be broken.* Upon an indictment for wounding, under the act of 9 Geo. 4, c. 31, sec. 12, it appeared that the prisoner had struck the prosecutor with an iron bar, and an iron hammer, and that the collar bone had been broken, and the end of the bone much injured by violence, and upon a case reviewed, all the judges except Bayley, B., and Park, J. A. J., thought that there

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[1] 2 Bouvier, Law Dictionary, 662.

was no wounding within the statute.[1] Lord LYNDHURST said, on one occasion, that "the definition of a wound, in criminal cases, is an injury to the person, by which the skin is broken. If the skin is broken and there is a bleeding, then it is a wound."[2]

It is not enough that the cuticle be divided, or that there is only a scratch; in such cases there is no wound in law, even though death results therefrom. A case is reported where it appeared that the prisoner attacked the prosecutor with a butcher's knife, and drawing him backward, attempted to cut his throat, an injury,—which the prosecutor described as a slight scratch,—was inflicted on the throat. PARK, B., said: "Nothing which can properly be called a wound has been inflicted in this case. A scratch is not a wound within the statute; there must, at least, be a division of the external surface of the body."[3]

Upon an indictment for wounding, a medical man said, that there was a slight abrasion of the skin, not exactly a wound, but an abrasion of the cuticle or upper skin, it did not penetrate further than that; blood would issue, but in different manner if the whole skin was cut. COLERIDGE, J., told the jury: "It is essential for you to be quite clear that a wound was inflicted. I am inclined to understand, and my learned brothers are of the same opinion, that if it is necessary to constitute a wound that the skin should be broken, it must be the whole skin; and it is not sufficient to show a separation of the cuticle only; you will, therefore, have to say on the first three counts, whether there was a wounding in the sense in which I have stated, viz: was there a wound,—a separation of the whole skin?"[4] If the skin is broken internally, it will constitute a wound in law. A surgeon stated, upon an indictment for wounding: "That the lower jaw on the left side was broken in two places; the skin was broken

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[1] Rex *v.* Wood, 1 R. & M. C. C. R. 278;—4 C. & P. 381; 1 Russ. on Crimes, 729.

[2] Mority *v.* Brooks, 6 C. & P. 684.

[3] Rex *v.* Beckett, 1 Moo. & R. 526.

[4] Reg. *v.* McLoughlin, 8 C. & P. 635.

internally, but not externally; there was not a great deal of blood; one fracture was near the chin and the other near the ear." The prosecutor had been struck by the prisoner with a hammer on the left side of the face, but there was no wound on the outside of the face. It was objected that this was not wounding. PARK, J. A. J., said: "When I first read the deposition, I thought there might be some doubt. In consequence, I have consulted with my Lord Chief-Justice, and considered the question very much in my own mind, and we are of the opinion that it is a wounding within the meaning of the act." Lord DENMAN, in the same case, said: "If it is the immediate effect of the injury, we think we can not distinguish this from the cases which have been decided." In summing up, PARK said: "A question was very properly put to us, as to whether we thought there was a wound within the meaning of the statute. We are of the opinion that there was a wound; and upon consideration, I am more strongly of that opinion than I was at the outset. There must be a wounding; but if there be a wound,—that is, if the skin is broken, whether there is effusion of blood or not,—it is within the statute, whether the wound is external or internal."[1]

Where a prisoner had bit off the end of a finger, it was held on a case reserved, that it was no wounding. So, when the nose has been bitten off, it has been held to be no wounding. So, when the prisoner had thrown a quantity of concentrated sulphuric acid into the face of the prosecutor, because there was no instrument used, that there was no wounding, and it was held the conviction was wrong.[2]

Any kind of instrument is sufficient, but there must be some instrument used, to make it a legal wounding. A stone bottle, a hedge stake, a gun, and even a shoe, if off, or on the foot. A kick from a bare foot would not be a wounding. It has not been

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[1] Reg. *v.* Smith, 8 C. & P. 173; Lord Denman, C. J.

[2] Rex *v.* Stevens, R. & M. C. C. R. 409; Rex *v.* Harris, 7 C. & P. 456; Rex *v.* Marron, R. & M. C. R. 456.

settled whether the teeth of a dog, which had been set to bite a person, can be considered as instruments within these statutes. In Elnasly's case, 2 Lew., 124, Alderson thought that the bite of a dog would be within the statute, but did not decide the question. In the Hugh case, Park decided that wounds inflicted by the teeth of dogs were not within the statute. It would seem, too, that the skin must be broken at the time, and that when sloughing takes place, thus destroying a large surface afterward, it is not within the statute.

In a case decided in the Queen's Bench, in 1847, in which the declaration alleged that the plaintiff had employed the defendant, who was a surgeon, for the treatment and cure of certain *wounds*, *fractures*, *bruises*, *complaints*, and disorders; but the evidence showed that the defendant had been employed to cure the plaintiff of a *dislocated* arm. At the close of the plaintiff's case, it was submitted to the learned Chief Baron, that there was no word in the declaration which was applicable to the case; but this objection was overruled. A dislocation, it was argued, was neither a wound, bruise, nor fracture; and the words "complaint and disorder" were not at all applicable to surgical cases, but to internal complaints, which required to be treated medicinally. Lord DENMAN, in delivering the opinion of the court, said: "It is rather strange that the pleader should have omitted the most appropriate word, but we think the Chief Baron was quite right." In this case the court does not say a dislocation is a wound,—they may have placed it under some of the other terms. In the United States the same rule of law prevails as in England, and a wound is defined in the same manner. In France a different definition obtains. All injuries are covered by the terms wound, blows, or violence to the body, and either includes all injuries to which the body is exposed.

Another question of much difficulty which the medical witness is to meet, is in regard to wounds or injuries "*dangerous to life.*"

As a general thing, no wound is considered dangerous to life, if it is not immediately dangerous. A wound to a great blood-

vessel, or to the brain, or to any important viscera, is a wounding dangerous to life.

In a certain sense any wound, however small, may be considered dangerous to life; but in law, a wound is dangerous to life, when in an ordinary case the chances are that *death* will result from the actual effects of the wound. Yet it is a very troublesome question for the medical witness, and he should state the difficulties attending an answer to the question. This question, like some others, therefore, is one upon which medical witnesses must almost necessarily differ, from its peculiar and comprehensive character. There being so many contingencies upon which the danger depends, one physician may take in more of these circumstances, or give to them more importance, than another. If the witness says the wound is not dangerous to life, then, in all probability, he will be asked if the wound was capable of producing "*grievous bodily harm.*" These terms are so uncertain and vague in their meaning, it is almost a matter of impossibility to say what degree of importance should be attached to them,—what might be a "grievous harm" in one case, might not be in another.

The safest course for the witness in regard to all these questions is, to give a true and plain account of the wound,—describing it minutely, and the probable consequences that may attend it.

The attending surgeon is likely to hear the dying statements of the person, when the wound is fatal, which statement may be very important evidence, and come to the court through him, as a common witness. A few things, therefore, in relation to dying declarations should be well understood by the medical witness.

Lord Chief Baron Eyre states the general principle upon which dying declarations are admitted in evidence to be this: that they are declarations made in extremity, when the party is at the point of death, and when every hope of this world is gone; when every motive to falsehood is silenced, and the mind is induced, by the most powerful consideration, to speak the truth. A situation so solemn and so awful, is considered by the law as creating an

obligation equal to that which is imposed by a positive oath in a court of justice.[1]

The dying declarations of a person made *in extremis*, are considered as being given under the same sense of responsibility as those declarations made under the sanction of an oath. The dying declarations of a person who would not have been a competent witness while living, will not be taken in evidence. A statement under oath is considered more important than that of a statement not sworn to, because it is supposed the immediate sanction of, and admission of the party's accountability to God, and the idea that he must answer for the truth of what he says, to his Maker, will induce him to tell the truth. The dying declarations, therefore, must be made under the awful sanction of an immediate expectation of meeting God, on the part of the person making them, or they can not be received in evidence. It is not enough that the person fears death, or looks forward to a certain death in the future; he must expect it,—feel that it is impending at the time. If his medical attendant informs him that he can not live, and *he believes* it, then his statements are taken in evidence; and it is sufficient, though much time elapses before death actually transpires, if he expected all the time to die at any moment.

The circumstances under which the declarations are made, are considered by the judge, and if sufficient he admits the testimony. When the deceased has made a writing and signed it, embodying his statement, it must be produced, if in existence, and parol evidence can not take its place.

It is not absolutely necessary that the precise language used by the deceased be given, but the substance must be stated.

The medical man should therefore note well the last words of the dying man, and the circumstances, and also his signs, for such signs, if *intelligible*, are also evidence.

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[1] Rex *v.* Woodcock, 2 Leach, Crim. Cases, 267–556; 1 Greenleaf, 209.

CHAPTER XXII.

PRIVILEGED COMMUNICATIONS.

THERE has existed a difference of opinion among Medico-legal writers as to the obligation of medical witnesses to reveal professional secrets upon the witness stand.

M. Fonblanque says, that when the ends of justice absolutely require the disclosure, there is no doubt that the medical witness is not only bound but compellable to give evidence, ever bearing in mind that the examination should not be carried further than may be relevant to the point in question; of this the court will judge, and protect the witness.[1]

On the other hand, an able French writer says: "The tribunals neither ought nor have the power to exact from a physician the revelation of a secret confided to him in consideration of his office; at all events he may and ought to refuse. Religion, probity, nay, the rights of society make this law. Still more are we bound to secrecy when not compelled to disclose. Upon this point casuists and juris-consults are of one opinion."[2]

It was decided in the important case of the Dutchess of Kingston, "that in a court of justice medical men *are* bound to divulge these secrets when required to do so." Lord MANSFIELD. said on that occasion: "if a medical man was voluntarily to reveal these secrets, to be sure he would be guilty of a breach of honor and of great indiscretion; but to give that information

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[1] Med. Juris. 160.

[2] Belloc, *Cours de Med.* Leq. 17.

which by the law of the land he is bound to do, will never be imputed to him as any indiscretion whatever."

In this case Sir C. Hawkins, who had attended the duchess as a medical man, was compelled to disclose what had been committed to him in confidence.

This is the Common law rule undoubtedly, in both England and this country; while some of the States, like New York, Missouri, Wisconsin, Iowa, Indiana, Michigan, and perhaps some others, have passed a statutory rule on the subject, in the following language: "No person duly authorized to practice physic or surgery, shall be allowed to disclose any information which he may have acquired in attending any patient in a professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon." But a physician consulted by the defendant in an action on the case for seduction, as to the means of producing abortion, is not privileged from testifying under this statute, as the information was not essential to a proper prescription.[2]

Some of the elementary writers insist that the medical witness ought to be privileged with regard to secrets confided to him in the course of his professional attendance, while others take the opposite ground.

Physicians, as a class, have never given up the idea that they were entitled to the immunities and privileges enjoyed by the attorney, and that their patients were worthy of the same protection as that meted out by the courts to the client of the attorney. Thus: John Gordon Smith, M. D., an English writer on Medical Evidence, whose work has never been republished in this country, says, after admitting that the rule of law compelled medical witnesses to testify on every point, without excepting professional secrets; "A precedent in law is a mighty authority: and I am quite satisfied that a point which has been so often and

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[1] Hargr. St. Tr. 243; 20 How. St. Tr. 613, 614.

[2] Hewitt *v.* Prime, 21 Wend. R. 79.

so uniformly ruled, will never be ruled otherwise in the courts of Westminster Hall. I am also well aware that to law, and rules of court, we must yield, or the administration of justice would be impeded. But although satisfied on these points, I am not contented that we should be placed beyond the pale of those, to whose private and confidential dealing with their fellow citizens, such respect is shown. I will not go at large into this question, my design being merely to draw the notice of my brethren to the circumstance, and to put them upon their guard as far as possible; yet will I say, that circumstances may occur, in which a man of a delicate and honorable mind, being the depository of certain things communicated to him, either under the seal of professional or private confidence, would endure much ere he would reveal. It will at once strike the manly mind, that in regard to females, we might be called upon to reveal that which the promulgation would to them, be worse than death itself."[1]

Dr. Charles A. Lee, the able and intelligent editor of the American edition of Guy's Forensic Medicine, says: "We believe it to be the moral right, and the duty of medical men, to refuse to disclose, in a court of justice, secrets intrusted to them in professional confidence, and we have always acted on such belief. If physicians become the repositories of secrets, under the full conviction, on the part of society, of our moral and professional obligations to hold them sacred,—secrets which otherwise never would have been revealed,—who can believe that there is any earthly power which ought to wring them from us, or which can, if we rightfully understand our privileges and duty? If private confidence is thus to be broken upon every imaginary necessity, where is the end to the mischievous consequences that would arise, especially at this day, where every trial is published to the world through the medium of the public prints? The lawyer is shielded from the obligation of revealing the secrets of his client, on the ground that it is necessary he should be acquainted with

[1] Smith's Analysis of Medical Evidence, 93.

the real facts in the case, for the purpose of conducting the defense, and because life and property are at stake. But we ask, if character and reputation are not often of equal value, and whether either of the former could be enjoyed without the possession of the latter? So also it may be observed, that the patient communicates freely with his physician for the purpose of judgment; no circumstances whatever, will warrant their publication to the world. In the case of females, such a disclosure would be in the highest degree indelicate, and often worse than any punishment that could be inflicted.[1]"

Thus medical men view the matter, and thus they reason upon it. But the rule of the Common law is against them, whether right or wrong.[2]

The discovery, vindication and establishment of truth, and the punishment of crime, are the main purposes of the existence of courts of justice. For this the rules of law are established, and to this end witnesses are put upon the stand, and they are to tell the whole truth bearing upon the case, unless there is some special, powerful reason why they should not.

The great interests of government, life, liberty and private property, all depend upon a well-settled system of evidence, by the rules of which the whole truth may be as surely as possible brought out. Any privilege that a witness may enjoy, which permits him to retain in his own bosom the knowledge of facts bearing upon the case at issue, contravenes the great object of all law, just to the extent that this privilege from testifying is permitted to reach. As facts are taken or kept from a court or jury, the means of arriving at a just conclusion are abridged, and from the want of the light of these very facts, thus kept out of sight, the ends of justice may be defeated,—the guilty escape,—the innocent suffer,—and possibly great public interests may be endangered.

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[1] Guy's Med. Juris. 16.

[2] Dixon *v.* Parmelee, 2 Verm. Rep. 185; Sherman *v.* Sherman, 1 Root, 486.

The reasons then, if any, for permitting private interests to outweigh the certainty of judicial investigations and their results, should, it would seem, be cogent and convincing. The justification should be a complete one, that will permit a witness to refuse information, essential perhaps, to the just solution of an important issue, possibly involving life. This information a privileged witness is permitted to refuse to give to a jury. Should not such witnesses be subjected to the severest scrutiny, and confined cautiously and carefully to the exceptional cases, where, it is claimed, greater evil will result if the truth is permitted to come out? A rule that limits the sources of information in courts of justice; that prevents truth from being followed into every channel, and brought forth from every lurking place; thus hazarding just results; is an exception, and an anomaly in law, and should be subjected to all the disabilities of an anomaly.

Since the time of Elizabeth, not before, the privilege of the counsel, solicitors, and attorney to refuse to testify to matters confidentially and professionally obtained, has hardly been questioned, yet even in these cases, the danger and difficulty of permitting the testimony to be withheld, have been felt. Chief-Justice Best says: "I think this confidence in the case of attorneys is a great anomaly in the law,"[1] and Lord Tenterden agrees with him.

The rule has been justified alone as necessary to secure the rights of the client, and the free and unembarrassed administration of justice; and it is supposed that the security and enjoyment of civil rights require that the client's secrets, when confined to the lawyer, shall be inviolate. Judge Story says: the privilege is not that of the attorney, but that of the client, and that such attorney can not disclose without the consent of the client, if he wished to.[2]

Mr. Greenleaf says: the great object of the rule seems plainly

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[1] Broad *v.* Pitt, 3 C. & P. 513.

[2] Chisac *v.* Reinicker, 11 W. 294; Curtis, 59.

to require that the "entire professional intercourse between client and attorney, whatever it may have consisted in, should be protected by professional secrecy." This is certainly basing the rule on very broad grounds;—possibly too broad. It will not be claimed that the privilege of lawyers arise from any partiality of the court toward members of the bar, but simply because he represents the client, and that his interests forbid the publicity of his case through his attorney. The attorney has no more rights, personally as a witness, than the physician or any other person, and if privileged, it is because he stands in the place of his client. Lord Chief-Justice BROUGHAM says: "the *foundation* of this rule, is not on account of any particular importance which the law attributed to the business of legal professors, or any particular disposition to afford them protection But it is out of regard to the interests of justice, which can not be upholden, and the administration of justice, which can not go on without the aid of men skilled in jurisprudence, in the practice of the courts, and in those matters affecting rights and obligations, which form the subject of all judicial proceedings."[1] The same learned judge says, in another case, that without this privilege no man would dare to consult a professional adviser, with a view to his defense and to the enforcement of his rights, and no man could safely come into court, either to obtain redress or to defend himself.[2] No interest, therefore, but that of the client, permits the attorney to refuse to give in his testimony in the case, and this interest, it is said, "comprehends the entire professional intercourse between client and attorney, whatever it may have consisted in."

As already shown, high English authority pronounces all this kind of testimony an anomaly in law; and Chief-Justice SHAW has said that "the privilege of exemption from testifying to facts actually known to the witness, is in contravention to the general rules of law; it is, therefore, watched with some strictness, and

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[1] Greenough *v.* Gaskill, 1 My. & R. 102, 103.
[2] 1 My. & R. 94, 95.

is not to be extended beyond the limits of that principle of policy upon which it is allowed." And again: "So strictly is the rule held, that the privilege extends only to communications made by the client to his attorney for the purpose of obtaining legal advice, that in a late case it was held, that a communication made by a client to his attorney, not for the purpose of asking his legal advice, but to obtain information as to a matter of fact, is not privileged, and may be disclosed by the attorney, if called as a witness in a cause:[1]" and again, in another case, he says, as the rule is one "having a tendency to prevent the full disclosure of the truth, it ought to be construed strictly."[2]

Where there is no particular motive for the disclosures of the client to the attorney, or to get information upon a point of fact, it will not be in either case a privileged communication. The reason for this privilege does not apply to instruments of conveyance. Public policy requires, that the facts attending the execution of such instruments should be publicly known, for the prevention of fraud.[3] The attorney is not permitted to be the judge as to what is or is not privileged from disclosure, but the question is decided by the court. If the communication was made to the counseller in the character of a friend, and not as counsel; or before he was employed; or after the employment has ceased; or when the attorney was consulted as attorney, but refused to act as such; or when the fact merely took place in the presence of the attorney; or when the matter communicated was not in its nature private; or when the thing disclosed had no reference to professional employment, though disclosed while the relation of attorney and client subsisted, or when the attorney made himself a subscribing witness; or when he was directed to plead the facts to which he is called to testify; or when he acts simply as an

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[1] 14 Pick. 423–3.

[2] Foster *v.* Hall, 12 Pick. 98.

[3] 1 Stark. Ev. 204; Wadsworth *v.* Hamshaw, 2 Brad. & Bingh. 5, note; Williams *v.* Mundie, Ryan & Moody, 34; S. C. C. & P. 158.

agent; the attorney is not privileged; so anxious are the courts to limit this kind of testimony in as close a compass as possible.[1]

It is difficult to see how the attorney can be permitted to occupy the position of a privileged witness to the extent laid down by the learned Mr. Greenleaf, as already quoted. There is no doubt but the tendency of jurisprudence is to limit, to a great extent, if not altogether abolish this privilege; therefore, under the statutes of Ohio and other States, the party to a civil action may himself be put upon the stand by the adverse party as a witness, and compelled "to testify as a witness, in the same manner, and subjected to the same rules as other witnesses."[2] If the privilege of the attorney depends upon his representative capacity, as it undoubtedly does, how can he be privileged in his "entire professional intercourse," while the client himself is not himself privileged. The reason for the attorney's privilege falls to the ground when the client himself is not privileged. True, in the Common law practice, the party is not a witness; but statutory law is in advance of the Common law, and in this case it is struggling to throw off all restraints to the complete investigation of all facts bearing upon the issue involved. Where the client is a competent witness, the testimony of his attorney can not certainly be privileged upon principle.

On what ground is the criminal exempted from being a witness?

Confession of guilt has always been encouraged by the courts. The criminal can, with a considerable degree of certainty, calculate upon a milder punishment if he shows penitence by confessing his guilt; the court then is ready and glad to get the evidences of the indicted person's guilt, even from his own lips. Why then is he not compelled to answer all questions that might be put to him tending to elicit the truth, either by the direct answer or by

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[1] 5 P. S. J. 65, Penn. Sharswood, J.; 1 Cain's R. 157; 1 Vert. 197; 2 Atk. 524; 43 R. 431; 43 R. 753; Cowp. 846; 2 Ves. 189; Str. 1122; 7 East. R. 357; 2 B. & B. 176; 3 John. 198; Peake's R. 77; 10 Mod. 40, 3 Burr. 1687; 7 N. S. 179; 14 Pick. 422.

[2] Swan's R. S. 663.

involving him in contradictions? Is it said that there will be a strong inducement to perjury? Is there not an inducement to perjury to almost the same extent, where the party in a civil suit is compelled to testify against his own interests? If that is an objection in one case, it certainly is in the other. The courts can not, in any case, prevent a witness from swearing false, they can only punish him when proven guilty; this reason then is hardly sufficient to privilege the criminal party where the civil party is obliged to testify.

The rule is, that when the answer tends to criminate, make liable to a penalty, or to disgrace the witness, he is excused. In civil cases this rule does not apply: in all such cases a witness can not refuse to answer any question relevant to the matter in issue, though such answer may subject him to a civil suit, or to pecuniary loss.[1]

It is difficult to see but one reason for the rule privileging the witness in criminal cases, and that is, that the courts would find it embarrassing in the extreme to enforce an opposite rule. Just in proportion to the severity of the penalty attached to the crime which the witness convicts himself of, will be the severity of the punishment necessary to compel such witness to testify; if the penalty is death, the witness will suffer every thing short of death before he will admit his guilt, when such punishment follows the admission. Hence, to enforce obedience to a rule requiring the witness to criminate himself, the court must resort to all the severity and horrors of the inquisition. To avoid this savage necessity, and not on account of any special rights of a criminal party over a civil one, the rule has properly been adopted, although the reason for it may not be admitted.

Under this view of the whole question, how can the medical man ask exemption from giving to the court and jury all the light he may possess bearing upon the issue? The question can not be treated cavalierly, by saying: "who can believe that there

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[1] Ball *v.* Loveland, 10 Pick. 9; Roscoe's Cr. Ev. 170.

is any earthly power which ought to wring from us such evidence; or which can, if we rightly understand our privileges and our duties." There must be a good and substantial reason for the privilege given if it should exist, because such a rule contravenes justice. The Common law knows no private confidence, except between husband and wife, and that of attorney and client, as we have seen, in which cases it is closely guarded, and only permitted to a certain extent, for reasons, as it is thought, of the highest public good. The rule can not be considered as established, that clergymen in certain cases shall be exempt from testifying in courts of justice, though there have been some decisions and statutory acts, permitting them to be privileged witnesses.

By the laws of New York and of Missouri, no minister of the Gospel or priest of any denomination, is allowed to disclose any confession made to him in his professional character, in the course of discipline enjoined by the rules or practice of his denomination.[1]

It can hardly be claimed that a person will be guilty of suicidal neglect of medical attendance, for fear of the testimony of medical men. No such case has ever been heard of. It would be criminal for a physician to aid, by his knowledge and science, in the commission of a crime or the perpetration of a fraud, and it will not be pretended that in such cases the medical witness should be excused from testifying.

If a medical witness is allowed to decline on his own judgment, he is privileged beyond the attorney, for the court decides and not the witness, whether he shall be privileged. If the physician does not decide for himself in what case he shall be privileged, then the court must hear the testimony, and this will involve the necessity of the testimony of experts, because the courts are not informed on medical subjects, and can not decide as to the character and necessity of medical treatment.

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[1] Phillipps' Evidence, 139.

Do medical men claim immunity because their patients would not be compelled to testify? In civil cases the patient, if a party, may be called upon to testify; and in criminal cases, if the physician attempted to shield the indicted person, would he not be *particeps criminis?*

So, in either case, it would seem, he ought to give in his testimony in full, that justice may be secured, by the punishment of the guilty and the protection of the innocent. None of the reasons for permitting the privilege of the attorney in behalf of his client applies to the physician in behalf of his patient. The physician in no sense represents his patient in court; the only ground on which the attorney is permitted to refuse to testify. Is the extremity of the patient the reason why the physician should be privileged? Just as well might the benevolent man, who has fed and lodged the hungry fugitive from justice, who has lain in the woods until death from starvation has driven him forth, claim that he ought to be a privileged witness, in regard to such fugitive criminal, because the great danger and suffering of the person, made it necessary for him to apply to him for help, as patients apply to the physician. The patient has no privileges that any other person in an extremity has not. The great ends of justice would be defeated, if, because a stern necessity, or supposed necessity, for the act done would exclude the evidence.

Those writers and medical men, who claim the privilege of refusing to testify for the medical witness, feel that the honor of the professional man is involved if he does divulge what has transpired in his practice,—they are undoubtedly actuated by the highest motives,—but would not such a general rule produce more evil than good? Are not the rights of society paramount to those of individuals in cases of this kind?

It is another and very different question, and one which will not be discussed here, whether the physician or surgeon is under obligations of secrecy, when not called upon by the authorities of the court, to withhold information that would lead to the detection of crime or the advancement of justice.

Two cases have lately arisen in the city of New York involving this question. One is that of the younger Dr. Mott, who was called upon to attend as surgeon, a burglar, who had been shot while in the act, but who escaped wounded, without being identified. From the account as published in the papers the next day, Dr. Mott was satisfied that the man whom he treated the night before for a pistol shot wound, was the burglar; and reported the case to the authorities, by whom the individual was arrested. There is no doubt, whatever may be the opinion of the act itself, but that Dr. Mott was influenced by the highest patriotic motives, in thus exposing himself to great personal danger for the advancement of justice.

The other case was connected with the celebrated Burdell and Cunningham tragedy. Dr. Uhl being consulted professionally by Mrs. Cunningham, to carry out her conspiracy to secure the Burdell estate, he repeated the matter voluntarily to the district attorney, who, through this information, was able to detect and expose the whole plan. Both of these cases have been extensively discussed and criticised by the medical profession, as to the obligation or right of medical men under these circumstances, to make known information thus acquired, when not upon the witness stand.

CHAPTER XXIII.

MEDICAL BOOKS AS EVIDENCE

Not only do medical men insist upon the rights of "privileged witnesses," but they also claim the right of introducing the authorized text books and elementary works of the profession in testimony, for the purpose of showing what the opinions of the best and ablest minds are upon the particular question at issue. They think the rule upon the subject has not been a consistent one, as books have sometimes been admitted, and at other times excluded. The question as to the admissibility of books has thus been kept open; the witness claiming the right to support his opinions by reference to authority, and the court, if permitting it at all, doing so by general consent and not upon principle.

Dr. Beck says: "In this country, I believe, the objection to medical books has never been made. There is scarcely a case of any note, where testimony has been required, in which frequent reference has not been had to medical works. They are quoted and commented on by the bench and bar and by the professional witnesses."[1] The learned author is undoubtedly mistaken if he means that these books were generally admitted as a right. It is only when there is no objection that they are testimony.

On the trial of Abner Rogers, jr., tried for the murder of Charles Lincoln, warden of the State Prison, in 1844, the defense was insanity, and one of the most able ever made. Every point was contested on both sides with marked ability, Chief-Justice

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[1] 2 Beck, Medical Jurisprudence, 919.

Shaw presiding. On this trial medical books were admitted, but in a subsequent case the same court refused to admit them.

The English and American authorities agree that professional or scientific books are not competent evidence in courts of justice. In the case of Collier *v.* Simpson, where the question was, whether a prescription was proper and the dose not too large, Chief-Justice Tindall ruled that medical books could not be introduced as evidence to determine whether the dose was too large, saying: "Physic depends more on practice than law. I think you may ask a witness whether, in the course of his reading, he has found this rule laid down." An attempt was made to show that the works of Sir Astley Cooper and Dr. Merriman were authority, and acted upon in the medical profession, when the Chief-Justice said: "I do not think that the books themselves can be read, but I do not see any objection to your asking Sir Henry Halford his judgment, and the grounds of it, which may be in some degree founded on books as a part of his general knowledge."[1] This is now the rule in England.[2] On the trial of the Commonwealth *v.* James Wilson, P. H. Sears, in opening the case for the defendant, proposed to read to the jury a definition of insanity, from works of established reputation on the subject; and contended that books written by lawyers were admissible, even if the court should hold that the treatises of medical writers were not. But Chief-Justice Shaw said: "Facts or opinions on the subject of insanity, as on any other subject, can not be laid before the jury except by the testimony under oath of persons skilled in such matter. Whether stated in the language of the court or of the counsel in a former case, or cited from the works of legal or medical writers, they are still statements of facts, and must be proved on oath. The opinion of a lawyer on such a question of fact, is entitled to no more weight than that of any other person not an expert. The principles governing the admissibility of

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[1] Collier *v.* Simpson, 5 Car. & Payne, 73.

[2] Cocks & Purday, 2 Car. & Kirw. 270.

such evidence, have been fully considered by this court since the trial of Rogers; and the more recent English authorities are against the admission of such evidence."[1] So in the case of Adaline Phelps, tried in the same State about the same time, Charles Allen, for the defense, undertook to read from various medical works in support of his views, but Judge DEWEY said: "The rule had been changed since the trial of Rogers, and that the court, upon full consultation, had decided to exclude all medical books."[2] The court, in an Iowa case, on the other hand, have decided that, "they can see no good reason why the physician may not read the views and opinions of distinguished writers. The opinions of an author, as contained in his works, we regard as better evidence than the mere statement of those opinions by a witness, who testifies as to his recollection of them from former reading. Is not the latter secondary to the former? On the whole, we think it the safest rule to admit standard medical books as evidence of their opinions upon questions of medical skill or practice involved in the trial. This rule appears to us the most accordant with well-established principles of evidence."[3] The reasoning in the above opinion will not stand the test of examination. It is not good law because not good logic, and against precedent.

The medical witness should bear in mind, that this rule applies not to medical books especially or peculiarly, but it is equally applicable to treatises on law, or any other science. Chief-Justice J. C. SPENCER says of law books, that they "may be sometimes read to inform the mind of the court, but never as evidence." A general history of a country may be read, not precisely as evidence, but to refresh the memory of the court in respect to general facts, which it is presumed to know. In an English case, Sergeant Ludlow proposed to read from Nicholls' History of

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[1] Commonwealth *v.* Wilson, 1 Gray, 338.

[2] The Monthly Law Reporter, May, 1854, p. 9.

[3] Bowman *v.* Woods, 1 Iowa R. 441.

Brecknockshire, a statement of the boundaries of that county, at the spot in controversy; when Baron ALDERSON said: "This is a history of Brecknockshire. The writer of this history probably had the same interest in enlarging the boundaries of the county as any other inhabitant of it. It is not like a general history of Wales. I shall not receive it."[1] Mr. Justice BULLER says: that a general history may be admitted to prove a matter relating to the kingdom at large, but can not be received as a proof of a private right or particular custom.[2] In Percy's case, which was an ejectment for the baroncy of Cackermouth, the lessor of plaintiff derived his title from Sir Inghram Percy, and offered in evidence Dugdale's Baronage of England; where it was stated that Sir Inghram Percy died without issue, but it was not allowed to be given in evidence. Lord Hale once refused to let Camden's Britannica be read as evidence, to prove a custom, but held that a general history might be given in evidence to prove a matter relating to the kingdom in general, because the nature of the thing requires it, but not to prove a particular right or custom. Counsel are permitted to read from their law books in court, not by right of any rule of evidence, but as part of their argument. Counsel have the right to argue any law point or matter of fact to the court, but any thing they read from elementary works, is no more evidence than what they say on their own responsibility, but it may have more weight in influencing the court because of the acknowledged ability of the author, than the language of the counsel. The court frequently says to counsel, "you need not read that authority, I am familiar with it, but I will be glad to hear what your opinion of the law applicable to the case is, and your reasons for such opinion." But after the elementary works and reports are read, the court is at liberty to charge the jury, or decide contrary to those authorities, if they are not the reports of a Superior court, to which an appeal will lie. The lawyer selects

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1 Evans *v.* Getting, 6 Car. & Payne, 586.
2 B. N. P. 248.

the authorities which he believes contain the law, but then he supports this position by argument; so the medical witness may base his opinion more or less upon the authorities he deems worthy of the greatest confidence, and he has a right to give the opinions of such writers in evidence, but he must be so far master of their opinions and so understand them, as to make them his own under oath.

The medical witness, therefore, has no just grounds of complaint, because his books are not received in evidence. The court honors his individual opinion as of higher value than that of an outside author. The court presumes, that from reading these authors, close thought and actual observation and experience; the witness under oath, subject to a cross-examination, will more certainly enlighten the case than if it depends upon the published opinions of authors, who perhaps, had a favorite theory to support or an old prejudice to influence them, on a question or subject constantly advancing. Then the author himself may have changed his opinions since the book was written.

Experience alone does not make up a valuable scientific opinion: if this is the principal element it is comparatively worthless. Experience in medicine, though of some value to a witness, yet it is often placed higher than its proper place. An intelligent medical opinion is but seldom based upon experience alone, or principally. Abercrombie says: "In point of fact, the knowledge which is acquired by an individual, through his own perception and reflection, is but a small part of what he possesses; much of the knowledge possessed by every one is acquired through the perception of other men."[1] Dr. Campbell, an English writer, observes that, "what has been rightly perceived may be misremembered, — what is rightly remembered, may, through incapacity, or through ill intention, be misreported, and what is rightly reported may be misunderstood. In any of these four ways, therefore, either of defect of memory, of elocution, or of

[1] Abercrombie on the Intellectual Powers, p. 47.

veracity in the relator, or by misapprehension in the hearer, there is a chance that the truth received by the information of the senses, may be misrepresented or mistaken." Dr. Gordon Smith says: "It is very possible, therefore, that he who depends upon his experience may be inferior, as to knowledge and intelligence, to the diligent student; for an accidental observer may be unqualified to make use of his opportunities, while the other may acquire much information, without going beyond the labors of others. The man of experience, moreover, has to labor as much single handed as all the rest put together, ere he can equal them in pretension; while the student again may have opportunities of experience to a minor extent, but will make a vastly better use of a few than the uninformed can of many. *Presumed* experience, for that is certainly what the word in its ordinary use must be restricted to, is in a great measure accidental; it must fall to the share of different individuals, in different forms and degrees; and I believe that no small portion of that odious discrepancy which has prevailed among medical witnesses, whereby the lustre of medicine itself has been so much tarnished, is chargeable to the prevalent affectation of being men of experience rather than men of learning,—to the over-anxious desire of being extensively employed, rather than solidly instructed and properly qualified."[1] It is dangerous, therefore, for a medical witness, when upon the stand, to depend in making up his opinions upon his own personal experience, instead of basing them upon the elementary writers upon the subject. With a thorough acquaintance of the standard writers on the science of medicine, he is qualified to give an opinion of his own on the matter at issue. It may be his own experience, but he has the satisfaction of knowing that he is sustained by authority. This gives to him confidence and certainty, and the opinion is so received by the court and jury. He leaves the stand with an enhanced reputation,—his profession vindicated and honored.

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[1] Smith's Analysis of Medical Evidence, p. 126.

Dr. Charles A. Lee, remarks upon this point: "How often do we see medical men of scanty experience, priding themselves upon their experience, and disparaging all knowledge derived from books, and by so doing, demonstrating alike their ignorance and want of sense; for what is individual experience at the best, when compared with the vast store accumulated by the sages of the profession in all ages. It is but as a drop of water compared with the ocean; a moment of time with eternity. Personal experience, unless enlarged, improved, and corrected by that of others, is of little value. Medical testimony, when of any value, is but little else than a reference to authority."[1]

The authorities, as we have seen, permit the witness, in giving his opinions, to give the reasons that bring him to his conclusions, which, in the language of Tindall, "may be in some degree founded on books, as a part of his general knowledge." He may even read from medical books while on the stand, adopting what he reads or refers to as his own opinions, and the jury will be instructed to receive and weigh such matter as evidence.

In this way and under such a license, all that the medical witness wishes to indorse under oath from any particular writer goes to the jury and nothing more; thus avoiding the loose habit of permitting whole medical libraries to be given in evidence, at the option of counsel or witnesses.

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[1] Guy's Medical Jurisprudence, p. 20.

CHAPTER XXIV.

INSANITY—KNOWLEDGE ON THE SUBJECT LIMITED.

Insanity stands at the head of Medico-legal questions, in its relation to Criminal and Civil Jurisprudence. The difficulties that surround its study seem to be insurmountable. As an element in criminal trials it is daily becoming more prominent and troublesome.

Countless volumes having been written by the ablest minds of the medical profession upon the great subject; quarterly and monthly periodicals having been established expressly for its discussion and elucidation; some of the ablest thinkers in medicine having made it for a life time a specialty; the patronage and support of governments being freely given to aid its unfortunate victims and those who take care of them; the popular mind and general reader come very naturally to conclude that the whole subject is well understood: or at least, that very much must be well settled and satisfactorily established; so that when the usually calm and transparent mental ocean world, becomes turbid and tumultuous from the action of the storms that sometimes sweep across its surface; it may still be safely navigated,—each sunken rock and shallow bottom detected, aided and guided by the beacon lights thus established upon the headlands.

With this general impression prevalent, it may be humiliating to the pathological and psychological student or scholar, to admit, that notwithstanding all that has been accomplished by the accumulation of facts, and the enunciation and discussion of theories upon the subject of insanity, especially during the last century, the whole question is still *sub judice.*

This state of the subject results, not from want of laborious, patient research by those best qualified to make it; but it depends

upon the inherent elementary difficulties investing and protecting the whole subject of aberration of mind,—difficulties that no human effort however great, has, up to this time, been able to surmount or remove.

After a protracted, learned and almost profitless discussion between the two schools of psychologists,—the materialist or pathological psychologist, and the spiritualist, or pure metaphysician, the main points of dispute, whether hallucinations in particular and insanity in general are *idiopathic*,—depending upon a derangement in the very *essence* of mind itself,—or whether they are *symptomatic*,—arising from actual disease in the brain, through which the mind manifests itself to the external world,—are perhaps as far from being settled as when the question was first propounded. Each party, it is true, considers the question settled according to its favorite theory.[1]

The ablest authors and teachers on the subject of insanity, generally hold to the material or somatic theory; yet, able as they are admitted to be, and notwithstanding the time and labor many of them have devoted to the subject, and the confidence they feel that their theory is correct, we have no settled classification or definite description of the pathological changes upon which they say the insane phenomena depend. Nor indeed, have they told us definitely where these pathological changes are. They are generally located in the brain. Dr. Rush based the disease in the blood.

Dr. Ray, whose ability is only equalled by his ardor, in his defense of the physical view or character of the subject, is compelled to acknowledge that "these pathological changes are not sufficiently definite to admit of classification, or of *practical application* in the various kinds of insanity." For what useful purpose then, is this theory of value in solving the mighty problem of insanity? The same writer thinks these changes in the

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[1] Dr. H. Morris' "Remarks on Insanity, its Nature and Treatment," London, 1850; Criminal Jurisprudence Considered in its Relation to Cerebral Organization, London, 1843.

organic structure, "to us are chiefly valuable, as showing the frequent liability to disease, either from excessive exertion or disuse of its own powers, or from its proneness to be affected by morbid irritations, that radiate from *other parts of the body.* We learn from these also, that changes of structure may proceed in the brain as in other organs, to an incurable degree, *without giving rise to much, if any very perceptible disturbance of its functions,* until some striking and *unexpected act* leads the enlightened physician to *suspect* its existence, and draws down upon the unfortunate subject the restraints and penalties of the law." It is the act of the person, and not the pathological symptoms, that determines the insanity, according to this writer. This is not very clear. The distinguished author not only fails to give any cases wherein his theory is of practical use, but thus directly admits its impractability.

If the brain may suffer from disease to an "incurable degree, without giving rise to much, if any perceptible disturbance of its functions," how is it that this condition of structure forms the basis, and gives rise to insanity? Or how do we know it depends upon diseased brain? Again he says: "Whatever opinion may be entertained of the nature of mind, it is generally admitted, at least by all enlightened physiologists, that it must of necessity be put in connection with matter, and that the brain is the part of the body by means of which this connection is effected. *Little as we know beyond this single fact,* it is enough to warrant the inference that derangement of the structure, *or of the vital actions* of the brain, must be followed by abnormal manifestations of the mind; and consequently, that the presence of the effect indicates the existence of the cause. This leads us to the source of the hesitation that has been evinced by pathologists to consider the brain as the seat of insanity."

It is undoubtedly true that all enlightened physiologists agree that the mind must be put in connection with matter before it can be manifested; still it is equally true that they agree that matter must be put in connection with mind, before there are any

mental phenomena. A union being necessary to produce a manifest effect, how are we to determine upon which the disease originally depends? Yet Dr. Ray stakes his favorite theory upon "*this single fact*, little as we know beyond it," and argues that it warrants the inference that derangement of the structure of the brain, or of the *vital actions*, must be followed by abnormal manifestations of the mind; and that consequently the effect,—insanity,—indicates the existence of the cause. He has already told us that there may exist disease of the brain to a fatal extent, without the mind apparently participating or sympathizing, or being affected by it. But he speaks of the *vital actions* being diseased. These vital actions connected with and constituting mental manifestations, are the very phenomena under discussion, and may be principally mind; at least they partake largely of the mental force operating as it does through the brain.

The proposition is well established that an injury or disease of the brain or disease of the body may produce insanity, but facts also show that this is not necessarily the case. It is also well known that in many of the worst cases of insanity, a post mortem examination reveals no diseased structure. Sometimes insanity arises from a sudden injury to the brain; at other times it is cured by the same kind of an injury.

Able physiologists and metaphysicians, like Professors Parker and Gilman, of New York, while they agree with Dr. Ray, that insanity always depends upon diseased physical organization, like him, they are wholly unable to show wherein this physical derangement consists.

On the trial of Charles B. Huntington, for forgery, where the defense was "moral insanity," Mr. Noyes, attorney for the State, asked Dr. Parker the following questions:

Mr. N.—"When you say that he has no appreciation of his situation, because of that diseased organization, you mean of course by that, *mental* organization?"

Dr. P.—"No, I do not; I mean the organization of the brain, —I mean the disease of the brain."

Mr. N.—"Do you mean diseased moral organization?"

Dr. P.—"I mean the diseases of the *functions* of the brain."

Mr. N.—"What particular organ is diseased?"

Dr. P.—"The brain."

Mr. N.—"Do you mean to say that his mental organization was such that he could not resist the impulse or tendency to commit forgery?"

Dr. P.—"I do; the 'tendency,' that is the word, sir."

Mr. N.—"That is the point then, upon which you place it,—that his mental organization was such that he could not resist the tendency to commit forgery. Now why could he not resist it?"

Dr. P.—"Because of his diseased organization. I do not mean mental organization. *The organization of the mind I know nothing about.*"

Mr. N.—"Do you say physical or mental?"

Dr. P.—"I say physical."

Mr. N.—"You say so because of his diseased physical organization?"

Dr. P.—"Yes."

Mr. N.—"What was the disease of his physical organization which prevented him from resisting the tendency to commit forgery?"

Dr. P.—"*I am unable to give you the pathological anatomy of the case.*"

Mr. N.—"Is that equivalent to saying that you are unable to give the reason why he was unable to resist the tendency to commit forgery in consequence of his organization?"

Dr. P.—"No, sir."

Mr. N.—"State what it is."

Dr. P.—"He had certain manifestation—certain symptoms. I am now speaking of what I saw."

Mr. N.—"My question was: what was there in his physical organization which prevented him from being able to resist the tendency to commit forgery?"

Dr. P.—"*That is the difficulty, the precise nature of which I can not explain. It is difficult to give a reason.*"

Professor Gilman being a witness on the same occasion, made the following statement, after saying that he believed the prisoner to be insane.

Mr. N.—"How would you characterize that unsoundness?"

Dr. G.—"I do not know that I can give it any name other than that it was insanity or unsoundness."

Mr. N.—"Would you say intellectual or moral?"

Dr. G.—"I think the two things were mixed together. If this man had no intellectual disturbance, he would appreciate his position, and not talk of getting out of this as he did. Then, as to this moral sense, there does not seem to me to be any of it."

Mr. N.—"Now, whether insanity be intellectual or moral, what is your view of it?"

Dr. G.—"I refer insanity to physical organization."

Mr. N.—"You take it then that the brain is diseased in all cases where insanity exists."

Dr. G.—"I think so."

Mr. N.—"Insanity of intellect is that which affects the intellect alone?"

Dr. G.—"The brain is injured. In one case the intellect is impaired; in another the moral nature is destroyed. They are both insane,—both result from physical change in the brain."

Mr. N.—"And *what* that physical change is, is entirely impossible to tell?"

Dr. G.—"*Entirely.*"

Mr. N.—"That is not within the compass of human knowledge?"

Dr. G.—"*It is not, so far as I know, within the measure of the acquired knowledge which we at present have.*"

Dr. Forbes Winslow, the able editor of the Psychological Journal, of London, says: he has examined no less than ten thousand cases of insanity reported by different authors, with a view to ascertain if there was physical disease as the basis of the trouble; and

the result is perfectly satisfactory to him, of the material cause of mental derangement: yet, he says: "I do not maintain that I am in a position to describe the peculiar and specific alterations which some allege to give origin to that derangement of the action of thought to which we apply the term insanity. Admitting such a discovery to be beyond the range of finite intelligence, it does not, in the slightest degree, militate against the material view just propounded."[1]

Dr. D. Meredith Reese thinks: "The *brain* is now recognized as the organ or instrument of the mind, in every enlightened creed, either among jurists, theologians, or physicians. The mind sits enthroned in its immaterial majesty, employing the brain, and its continuous elongation in the nerves, not only in directing all the intellectual, moral, and instinctive faculties, but in the perception by the several senses, and in the mobility of the voluntary muscles, in obedience to the will; and in a subordinate way, by innervation, it may be regarded as enabling every organ and tissue in the human body to perform its destined function, in conformity to the vital laws."

Thus the ablest advocates of the doctrine, that insanity depends always upon disease of the structure of the brain, or of some other part of the body, are unable to tell what or where it is.

On the other hand, difficulties of equal, and perhaps greater magnitude, stare those psychologists in the face who reject the material explanation, and thereby admit, if not squarely declare, that the immaterial, immortal essence of pure thought may be subject to disease.[2] That this Godlike principle is liable to become diseased like the grosser parts of the singularly intricate combination we call the physical man. Is not this contrary to our conception of that wonderful spirit that thinks within us? If the spiritual principle is subject to disease, why not to death,—to complete destruction or dissolution, the natural result of disease?

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[1] Journal of Psychological Medicine, Vol. 7, 212.

[2] See Dr. Monroe's Remarks on Insanity, etc., London, 1850.

"How can that subtle, mental essence, which has neither members nor parts, be disordered? How can the immortal principle within us decay? It can not be; disease, disorder, decay, all belong to the body, and to the body only; and consequently we must place the essential seat of insanity in the body, not the mind."[1]

It does not, however, follow conclusively that because mind is immaterial, it can not become diseased in itself, nor does this view render the immortality of the soul less probable and true.

Sir Benjamin Brodie, Bart., D. C. L., the distinguished surgeon, physiologist and psychologist, says: "I entirely agree with you in the opinion that we must admit the existence of the Deity as a fact well established as that of the law of gravitation, and that in doing so, we must further admit that mind may and does exist independently of bodily organization. Be it also admitted that *mind*, in its humblest form, is still *mind*, and that immeasurable as the distance between them may be, it must, nevertheless, be regarded as being of the same essence with that of the Deity himself. For my own part, I find no difficulty in conceiving the existence of mind independently of corporeal organs. It seems to me, the best writers on mental philosophy have erred in considering the mind too abstractedly, and in not taking sufficiently into the account the physical influences to which it is subjected. I am aware that mental derangement may in many instances be traced to *moral* causes as its original source, *and far be it* from me to assert that the one indivisible percipient thinking being, which each of us feels himself to be, may not be in *itself liable to changes, independently* of any previous change in the material structure with which it is associated."[2]

Insanity may not be either a disease of the body or of the mind, but may involve both. If this is not the true view of the matter, how is it that the disease is more frequently cured by a

[1] Prof. Gillman's Introductory Address on the Relations of the Medical and Legal Profession, p. 18.

[2] Mind and Matter, pages 40, 95.

judicious combination of moral and medical treatment, and almost always remediless by unassisted nature?

An able writer says: "It is not a purely corporeal disease, like one of the nervoses; it is not a nervous affection merely, but a nervosis, and something more; neither is it purely a mental affection, or disease. Both mind and body are at fault. According to the views of Feuchterleben, it is *their relation* that is diseased,—of the body to the mind, so that perception is morbid,—of the mind to the body,—so that volition is disordered. From which, then, does that disturbed relation proceed, which when established, becomes reciprocal?" * * * "I repeat, that insanity is not, strictly speaking, to be termed either a bodily or a mental disease,—that it is a disturbed reciprocal relation of mind and body; but that, in its origin, it is sometimes a mental, sometimes a bodily disease."[1]

Dr. Carpenter, the distinguished English physiologist, says: "The degree in which the operations of the mind are dependent upon its material instruments, is a question which can not be regarded as conclusively determined by scientific evidence alone, and it has little practical bearing on physiological research. The doctrine usually regarded as having the best Scriptural basis,—that the mind has an existence altogether distinct from that of the body,—is attended with several difficulties, of which those arising from the phenomena of insanity are perhaps the most important. On the other hand, the opinion held by some, that mental phenomena are the mere result of material changes, appear to involve difficulties at least equal, among which may be noticed, the consciousness of personal identity, preserved throughout the continued and rapid changes to which the nervous system is subject. The assertion, however, that physiological operations can not be the result of material changes, is based on the assumption that we know far more of the essential character of both than is

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[1] Robert Jameson, M. D., Professor of Medical Jurisprudence in the University of King's College, Aberdeen.

admitted by the best metaphysicians to be the case regarding either. *This is a question which scarcely comes within the boundaries of human knowledge.*

Thus we see, at the very threshold of investigation on this subject, that the metaphysician and pathologist are unable to determine satisfactorily the nature of the cause or the nature of the effect they witness. Though enthusiastic, and anxious to press up directly into this wonderful and luminous temple, where *thought* dwells, they hear a voice like the voice of God, saying: "Put off thy shoes from off thy feet, for the ground whereon thou standeth is holy ground."

Not only at the outset do difficulties arise, but they deepen and multiply constantly at every step, in the investigation of insanity. These difficulties form an essential element in determining all questions of insanity. It is because of these difficulties, that the great labor and study bestowed upon them by the medical profession, have proved so fruitless. It should be no reproach however, to this great profession, that because it has sunk many shafts with great skill, labor and perseverance, that the deep and extensive mine is still hardly reached, and to a great extent unexplored.

There is a vast difference between arranging sanitary institutions and favorable external circumstances for the insane man, and grappling with the invisible, intangible, ever varying spirit of insanity itself. Much has been accomplished in the former, nothing comparatively in the latter.

The various eccentricities of sane men,—the diversity of motives influencing their conduct, and the cunning of the insane, greatly embarrass the problem.

The eccentricities of genius in particular, so much resemble insanity, who can, without long observation and the careful weight and consideration of a series of various acts, determine and ascertain which is the normal and which the insane state?

Knaggs, in his work on unsoundness of mind, says: "There was an old man well known in London during the last century,

who was of an ungainly appearance, and subject to occasional attacks of hereditary melancholy. So inconsistent was he in his habits, that sometimes he practiced great abstemiousness, and at other times devoured large meals with brutish slovenliness and voracity. Sometimes he would persist in drinking nothing but water, but occasionally drank wine by tumblersful. His income was far from large, and not of a certain amount, yet he kept a set of old men and women about his house, whose bickerings and disagreements now and then drove him out of doors. He was in general very loquacious, but has been known to sit in company and drink a dozen cups of tea, without speaking a syllable. When not engaged in discoursing, it was his custom to keep muttering to himself. In walking he performed strange gesticulations, and would not go in at a door unless he could effect his entry in a certain preconceived number of steps, and so as to introduce himself on a particular foot,—turning back and recommencing until he succeeded as he desired. There was a row of posts near his house, which he would not pass without touching singly, and if he omitted one in the series, he retraced his steps to remedy the neglect. He hoarded up orange skins for some mysterious purpose he would never divulge. He suffered remorse of conscience for having taken milk in coffee on Good Friday. He believed in ghosts, and went ghost hunting in Cock Lane, and maintained that he heard his mother calling for him by name in the world." Was not this man insane? So far from it, Dr. Johnson was by consent, regarded one of the most vigorous thinkers of his time, and to-day he is called one of the greatest sages and ablest writers that ever lived.

The lunatic not unfrequently shows more judgment and cunning than the sane. "A short time ago, a parish officer, from the neighborhood of Middleton, took a lunatic to the asylum, pursuant to an order signed by two magistrates. As the man was respectably connected, a gig was hired for the purpose, and he was persuaded that it was merely an excursion of pleasure on which he was going. In the course of the journey, however, something occur-

red to arouse the suspicions of the lunatic with respect to his real destination; but he said nothing on the subject, made no resistance, and seemed to enjoy his jaunt. When they arrived at Lancaster, it was too late in the evening to proceed to the asylum, and they took up their quarters for the night at an inn. Very early in the morning the lunatic got up and searched the pockets of the officer, where he found the magistrate's order for his own detention, which, of course, let him completely into the secret. With that cunning which madmen not unfrequently display, he made the best of his way to the asylum, saw one of the keepers, and told him that he had got a sad mad fellow down at Lancaster, whom he should bring up in the course of the day, adding: "He's a very queer fellow, and he has got very odd ways. For instance, I should not wonder if he was to say I was the madman, and that he was bringing me; but you must take good care of him, and not believe a word that he says." The keeper, of course, promised compliance, and the lunatic walked back to the inn, where he found the officer still fast asleep. He awoke him, and they sat down to breakfast together. "You're a lazy fellow to be sleeping all day; I have had a long walk this morning," says the lunatic. "Indeed," says the officer, "I should like to have a walk myself after breakfast; perhaps you will go with me?" The lunatic assented, and after breakfast they sat out, the officer leading the way toward the lunatic asylum, intending to deliver his charge; but it never occurred to him to examine whether his order was safe. When they got within sight of the asylum the lunatic exclaimed:—"What a fine house that is!" "Yes," said the officer, "I should like to see the inside of it." "So should I," observed the lunatic. "Well, I dare say they will let us through,—I will ask," was the response. They went to the door; the officer rang the bell, and the keeper whom the lunatic had previously seen, made his appearance, with two or three assistants. The officer then began to fumble in his pockets for the order, when the lunatic produced it, and gave to the keeper, saying: "This is the man of whom I spoke to you about.

You will take care of him; shave his head, and put a strait waistcoat on him." The men immediately laid hands on the poor officer, who vociferated loudly that the other was the madman, and he the officer; but, as this only confirmed the story previously told by the lunatic, it did not at all tend to procure his liberation. He was taken away, and became so indignantly furious that a straight waistcoat was speedily put upon him, and his head was shaved, *secundum artem*. Meanwhile, the lunatic walked deliberately back to the inn, paid the reckoning, and set out on his journey homeward. The good people in the country were, of course, surprised on seeing the wrong man return; they were afraid that the lunatic, in a fit of phrensy, had murdered the officer, and they asked him, with much trepidation, what he had done with Mr. Stevenson. "Done with him?" said the madman, "why, I left him at the Lancaster Asylum, as mad as a fury!" which, indeed, was not very far from the truth; for the wits of the officer were well nigh upset by his unexpected detention and subsequent treatment.

Further inquiry was forthwith made by his neighbors, and it was ascertained that the man was actually in the asylum. A magistrate's order was produced for his liberation; and he returned home with a handkerchief tied around his head in lieu of the covering which nature had bestowed upon it."[1]

There is no standard of health or disease, and so gradually do they mingle,—mental as well as physical,—that the line between them is an imaginary one. Who at the close of day can mark where daylight ends and darkness begins; or who can tell where a child passes the line of accountability? "When do virtue and vice fade into each other? Where is the boundary of courage and rashness, between prudence and cowardice, between frugality and avarice, liberality and profligacy? A good action is not distinguished from a bad action by marks so plain as those which

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[1] Manchester, (England,) Guardian; W. & S. Med. Juris. 95.

distinguish a hexagon from a square!"[1] When any or all of these things can be done, then, and not till then, may insanity be defined and its boundaries established. "Who can mark precisely the frontiers, the almost imperceptible limits which separate insanity from sanity? Who can number the degrees by which reason declines and falls into annihilation? This would be to prescribe limits to that which is illimitable, to give rules to folly, to be bewildered with order, to be lost with wisdom."[2]

In cases of sudden or lingering death from poison, the medical witness, if a toxicologist, is in a field where the landmarks are well defined,—he has the data to guide him to a reasonable and a correct conclusion,—he has those tests to direct him, the certainty of which has been established beyond a question; his deductions are therefore sound and safe. Courts of justice may and do act upon his opinions, in these cases, with an assurance amounting almost to certainty that they are true, exact, and not theoretical and speculative. So with a great variety of Medico-legal questions. A *post mortem* examination will, in many cases, under the light of science, bring out the truth, and the court gladly receives it from the medical witness. The criminal may have poisoned his victim, and the body of such victim may have crumbled into dust, and scores of years passed over his grave, when the chemist will sift those ashes and separate the incontrovertible evidence of the guilt of the murderer; the court will pronounce sentence, and justice will be vindicated by the scientific knowledge of the chemist applied to the question.

"How different, however, is the position of the witness, when his mind is brought to a consideration of the questions connected with morbid *mental* phenomena! In his exalted inquiries, he has no fixed or certain tests,—no infallible standard,—no well-defined rules,—no principles of exact science to aid him,—no beacon to protect him from the rocks and quicksands which beset his

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[1] Hon. B. Macauley, M. P.

[2] M. d'Aguesseau, before the Parliament of Paris.

course,—no chart to refer to in times of difficulty,—no compass to guide him in the hour of danger,—no harbor of refuge into which he can run his fragile vessel when the tempest is howling and destruction impending. As Medico-legal witnesses, the obstacles with which we have to contend, are often of a grave and serious character. We have to deal with phenomena, of the essence or intimate nature of what we know *absolutely*, positively *nothing*. It is our duty to elucidate principles of belief,—to unravel motions of action,—to explain erratic conduct the most anomalous and extraordinary. We have to trace the line which separates passion,—the subtle and shifting transformations of wild, ungovernable, impetuous passion,—from the excitement of mania, and the morbid emotions incident to the minor forms of diseased mind; to sketch the varying frontier, the nice and shadowy distinction, which separates lunacy from malignity,—madness from brutality; to point out where folly merges into mental derangement,—where responsibility terminates, and irresponsibility commences; to distinguish between eccentricity and insanity,—crime and alienation of mind,—vice and mental derangement,—between the delusion of the lunatic, and the false conclusions,—the illogical deductions,—the unphilosophical reasoning of men of sound intellect and of rational understanding,—to separate rhapsodies of the healthy imagination, and the Arcadian illusion of the poet, from the morbid conceptions of the fancy:

> 'Daggers of the mind,—false creations,—
> Proceeding from the heat-oppressed brains,'

'those thick-coming fancies,' the products,—the well-recognized, indisputable symptom of a mind thrown off its healthy balance by actual cerebral disease.

There is no possibility of our placing the mental elements submitted to our critical examination in a physiological or test-tube; and we can not avail ourselves, in these investigations, of the aid of the microscope; there is no mode by which we can penetrate behind the curtain, or tear aside the veil that divides the *material*

from the immaterial,—mind from matter; there is no possibility of our obtaining access to those mysterious chambers where the spiritual portion of our nature is elaborated; we have no gauge, no square rule, by which we can ascertain in all cases, with any approach to chemical or mathematical accuracy, an accurate idea of the actual condition of the mind, when apparently under a cloud. In the elucidation of these points, we are in a great measure left to our own unaided mental sense,—to the uncertain guidance of our deceptive experience, and alas! often fallible judgment."[1]

The absurd and contradictory classifications or nosology adopted by different authors upon the subject of insanity, add greatly to the confusion and uncertainty that surround it; placing the matter absolutely beyond the reach of the unprofessional. The extent and minuteness to which these classifications are carried tend only to embarrass the courts. With them the question is not as to what order, class or division does the malady belong, but it is as to the responsibility of the party. "Is he insane?" When a court is endeavoring to ascertain whether poison has been administered, the question is not, "to what class or order does the article administered belong," but it is, "is the article a poison?" So in the investigations of insanity; the important point is not as to the species of the disease; it is, "whether the party is responsible for his acts?"

Every writer upon insanity has a system of nomenclature of his own. Dr. Ray modifies that of Esquirol, and makes it the basis of his classifications as follows: General divisions,—Idiocy, Imbecility, Mania, Dementia. Idiocy is subdivided into two kinds. Imbecility is also subdivided into two kinds. Mania is divided into Intellectual and Affective, and these each into General and Partial. Dementia he divides into, Consecutive to Mania, and Senile.

Of these groups he says: "We shall often find them running

[1] Dr. Forbes Winslow, Editor of the London Journal of Psychological Med.

into one another, and be puzzled to assign to a particular disease its proper place; but since such is the order of nature, we must make the most of the good it presents, and remedy its evils in the best manner we can."

The classification of Flemming is still more complex and difficult. His first divisions are two: imbecility and mental confusion. Imbecility he subdivides according to origin and extent. Its origin may be congenital, or arise from wounds on the head, from nervous fevers or epilepsy, or from old age. As to extent, it may be limited imbecility, and this he divides up into three kinds: weakness of memory, imbecility of the deaf and dumb, and imbecility of the blind; or there may be general weakness of mind. Mental confusion he subdivides into disorder of temperament, disturbance of the understanding, and general depravity. Disorder of temperament he divides again into six kinds. The symptoms of the first order are irritability, proneness to agitation, irascibility, excessive disgust, etc. The characteristic of the second kind is, "being an anomalous condition of particular states of feeling, inclination, and impulses." This is again divided up into; 1. Cases of "sadness, fear, dread, homesickness," etc.; 2. That of "hilarity, recklessness of manner, raillery, proneness to see all things in the most vivacious light;" 3. "*Vacillation between the two foregoing forms.*" The third form of disorder of temperament is characterized by "apparent obtuseness, dull, heavy reveries and abstractions, indistinct sensation of discomfort," etc.

His second subdivision of "mental unsoundness," consists of disturbance of understanding. The characteristic here is "the depravity of the physical powers, *with a controlling anomalousness of the intellectual faculties*," etc. This "anomalousness" is run out to a very fine point; 1. "The characteristics being unexpected appearances and rapid subsidence; 2. Febrile delirium; 3. Drunkenness; 4. Madness, caused by agitation of mind; 5. *Confusion of mind* in sleep; 6. Somnambulism; 7. Chronic anoesia; 8. Remittent anoesia; 9. Partial anoesia; 10. Hallucinations; 11. Eccentricity, etc.; 12. General anoesia, etc."

The third subdivision of mental confusion contains ten or a dozen other subdivisions.

This classification Wharton and Stille adopt, saying it "is very valuable, both for the delicate precision of its analysis, and for the important aid it affords to the nomenclature of forensic psychology."[1] This may all be true, but it is so "delicate" we fail to perceive any advantage that can be derived from such a classification. It is certainly liberal enough to encompass within its folds every son and daughter of Adam, sane or insane. It tends only to render the darkness of the subject more visible.

Then we have, in the "moral" department of the subject, a subdivision as extensive as are the propensities to commit various kinds of crime, viz: homicidal mania, kleptomania, pyromania, aidoiomania, pseudonomania, oikeiomania, suicidal mania, fanatico-mania, politico-mania, etc. There indeed seems to be a name for every conceivable kind of mania, except that of maniacal classification, or insane nomenclature.

The divison of the subject by some late writers into intellectual, emotional, and instinctive, when well defined and guarded, which is seldom the case, is less objectionable, because the divisions are fewer and more natural than the common system.

These divisions and subdivisions being found in all the text books on the subject of insanity, the attorney has a right to expect, that when the medical witness comes upon the stand, if he has given to the subject particular attention, that he will be able to assign each case to its proper class, order and species; and when the witness fails to do this, as fail he always must, he is considered and looked upon as a pretender, not possessed of the accessible knowledge upon the subject. The witness is mortified, the attorney is disgusted, and the court and jury are left in greater doubt upon the issue before them than at the outset of the investigation.

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[1] W. & S. Medical Jurisprudence, 61.

CHAPTER XXV.

THE POSITION OF THE COURTS UPON INSANITY.

In view of all the doubt and uncertainty that surround the question of insanity, it seems singular that Dr. Ray, Dr. Gilman, and other writers upon insanity, should arraign the courts so critically and severely, because of an alleged delinquency in not having adopted a certain and positive rule by which an insane man may not be improperly punished. Dr. Ray and Prof. Gilman are particularly severe in their strictures upon the judiciary.

Prof. Gilman says: "Can it be doubted that in all its force and in all its apparent harshness, the proposition is true, that where this right and wrong test has controlled the administration of the law, the result has been the perpetration upon the scaffold of most cruel murders? Will any one say that the reckless haste that denied to poor Bellingham the few days necessary to establish his defense, was ought less than murderous?

Was the partiality that sent Laurence to the gallows, while Ross Touchet was spared, any thing but murderous?

Above all, was the hanging of Thomas Bowler after he had been, upon due legal investigation, declared insane, and as insane deprived of the control of his property, aught but murder?

The law must not continue this already too long catalogue of judicial murders. The law must not keep in her rusty armory a test of sanity which every man who has any knowledge of the subject knows to be vain and futile; the law must not keep this relic of an unenlightened age by her, to be brought out, as whim, or chance, or the feeling of the hour may dictate, to slay those

whom the Almighty, in his mysterious,—most mysterious providence,—has visited with a disease, compared to which all other and mere physical diseases are but as nothing. Such beings, instead of being dragged to the scaffold or thrust into the prison-house, should be hallowed by their great misery. The heathen worshipped the tree that had been struck by lightning; let not Christian men be found less easily moved to sympathy with human sorrows."[1]

Dr. Ray also, is unsparing in his charges against the courts, while he at the same time admits the slow progress thus far made in mental aberration. He says: "If the above hasty review of the judicial opinions and practices that have hitherto prevailed relative to insanity, left the impression that this disease is as yet but imperfectly understood, as well in the medical profession as out of it, an explanation of this fact may perhaps be demanded; but as it would be hardly relevant to the present purpose to enter largely into a discussion of this point, nothing more will be attempted than merely to indicate what seems to have had the principal share in producing it. To explain the *little progress*, comparatively speaking, that has been made by medical men in the knowledge of insanity, it is too much the fashion to allege that they have neglected the study of mental philosophy, or that of mind in the healthy state, which is indispensable to correct notions on the disordered condition of the mind. So far, however, is the fact here indicated from being true generally, that one can not hesitate to say that the result in question has been owing to the undue account that physicians have made of the popular philosophy of mind, in explaining the phenomena of insanity, and that they have *failed*, in consequence of *studying metaphysics too much* instead of too little. While it is admitted that the knowledge of healthy structure and functions is necessary to a thorough understanding of diseased structure and functions, there is every reason to believe that the converse of the

[1] A Medico-legal Examination of the case of Charles B. Huntington, 23, 24.

proposition is equally true; neither can be successfully studied independently of the other. In the prosecution of psychological science, this latter truth has been almost entirely disregarded, and therefore it is that we see the metaphysician looking for his facts and his theories in the healthy manifestations of the mind, and directed in his course solely by his own self-consciousness, while the student of insanity, after collecting his facts with commendable diligence and discrimination, amid the disorder and irregularity of disease, resorts to the theories of the former, for the purpose of generalizing his results, instead of building upon them a philosophy of his own. Metaphysics, in its present condition, is utterly incompetent to furnish a satisfactory explanation of the phenomena of insanity, and a more deplorable waste of ingenuity can hardly be imagined, than is witnessed in the modern attempts to reconcile the facts of the one with the speculations of the other. In proof of the truth of these assertions, it is enough barely to mention, that the existence of monomania, as a distinct form of mental derangement, was denied and declared to be a fiction of medical men, long after it had taken its place among the established truths of science, because probably, it was a condition of mind not described by metaphysical writers. All this, however, is in accordance with a well-known law of the human mind, which resists important innovations upon the common modes of thinking till long after they shall have been required by the general progress of knowledge. The dominant philosophy has prevailed so long and so extensively, and has become so firmly rooted in men's minds, that they who refuse to take it on trust, and who seriously inquire into its foundations, and after finding them too narrow and imperfect, are bold enough to endeavor to remedy its defects by laying foundations of their own, are stigmatized as visionaries, and overwhelmed with ridicule and censure. The only metaphysical system of modern times which professes to be founded on the observation of nature, and which really does explain the phenomena of insanity with a clearness and verisimilitude that strongly corroborate its proofs, was so far from being

joyfully received, that it is still confined to a sect, and is regarded by the world at large as one of those strange vagaries in which the human mind has sometimes loved to indulge. So true it is, that in theory, all mankind are agreed in encouraging and applauding the humblest attempt to enlarge the sphere of our ideas, while in practice, it often seems as if they were no less agreed to crush them by means of every weapon that wit, argument and calumny can furnish. In the course of this work the reader will have frequent occasion to see how the popular misconceptions,—which are too much adopted by professional men,—of the nature of various forms of mental derangement, have been produced and fostered by the current metaphysical doctrines, and thus may have some means of judging for himself, how far the *imperfect notions of insanity, that are prevalent*, may be attributed to the cause above assigned."[1]

The learned author would have less of metaphysics and more of pathology,—the former failing to solve the great problem of insanity, he adopts the latter,—attributing insanity, as he does, wholly to disease of the brain, as if the scalpel could reveal the hidden sources and springs of insane actions. We fear neither morbid anatomy nor an analysis of the blood,—where Dr. Rush supposed insanity to be located,—will throw but a very dim light upon the subject. Let anatomists and physiologists labor as long and as hard as Dr. Ray admits metaphysicians have done, then, and not till then, should they denounce the study of metaphysics as fruitless, and as laying the ground for false theories and conclusions as to the understanding and the treatment, medically and legally, of insanity.

Dr. Ray, by whose own writings we have shown the want of definite knowledge upon the question of insanity, commences his book with a criticism upon the courts, as severe as it is unreasonable; and from the assurance and confidence with which he starts out, we naturally expect that before he closes his labors he will

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[1] Ray's Medical Jurisprudence of Insanity, p. 66.

set the courts right, by defining the boundaries of insanity accurately, and point out its *indices* so clearly that they may not err in future. This, however, he does not do. When he comes to the troublesome points,—those upon which rest all the dispute and doubt,—he deals in generalities, leaving the matter really where he found it,—a *terra incognita*.

Of the judicial aspect and condition of the question, he says: "Few, probably, whose attention has not been particularly directed to the subject, are aware how far the condition of the law relative to insanity is behind the present state of our knowledge concerning that disease. While so much has been done, within a comparatively short period, to promote the comfort of the insane, and so much improvement has been effected in the methods of treating their disorder, as to have deprived it of half its terrors, it is both a curious and a melancholy fact, that so little has been accomplished toward regulating their personal and social rights, by more correct and enlightened principles of jurisprudence. While nations are vying with one another in the excellence of their public institutions for the accommodation of this unfortunate class of our fellow men, and physicans are every year publishing some instances of an unexampled proportion of cures, we remain perfectly satisfied with the wisdom of our predecessors in every thing relative to their legal relations." And yet, in the same paragraph there is an admission that "insanity itself is an affection so obscure and perplexing," that an ample field is required for its illustration and discussion. After stating "the *only difficulty*,"—and it looks like a most radical one, embodying the whole question,—"or diversity of opinion, *consists in determining who are really insane*, in the meaning of the law,"—or he might add with more propriety, in the meaning of medical men,—"which has been content with merely laying down some general principles, and leaving their application to the discretion of the judicial authorities." At this very spot, has always been the great stumbling-block with the courts as well as with every body else, and from whence arises all the difficulty, "*of determining who are really*

insane." The reason of this difference of opinion and difficulty, is accounted for by Dr. Ray as follows: "Inasmuch as the greatest possible variety is presented by the mental phenomena in a state of health, it is obvious, that *profound* study and *extensive observation* of the moral and intellectual nature of man can alone prevent us from sometimes *confounding them* with the effects of disease. It would seem, therefore, an almost self-evident proposition, that a certain knowledge of the mind in its healthy state," —that is, each individual mind,—"is an essential preliminary to the attainment of correct ideas concerning its diseased manifestations." And yet he blames and denounces the courts for not having general, fixed, and liberal rules, on a subject where each case is unlike all others.

Dr. Ray also complains that while in criminal cases the courts are too severe, in civil ones they are too lenient, or too ready to admit the insanity of the party. He says: "we can not but think that the ends of justice would be better obtained if no general rule at all were adopted, and every case decided on its own merits. Where the insanity of one of the parties is perfectly well known to the other, or might have been so by the exercise of ordinary sagacity, a contract between them, except for the necessaries of life, or comforts and luxuries suitable to his wealth or situation, should obviously be held invalid, because the insane party is deprived by the act of Providence of his natural share of discernment and foresight. It often happens, however, that a person's insanity is not generally known and is not very apparent, and in such cases, if it can be proved that the contract is a fair one and reasonable on the face of it, and was entered into in perfect honesty and good faith, he certainly should not be permitted to stultify himself in order to escape its performance. Neither does his death or interdiction so change the case, as to render it proper for his heirs or guardians to do that which he could not do for himself. Much as the law is bound to protect the interests of the insane, it is no less required to protect those who deal with them, unacquainted with their mental condition.

It as often happens, that the same party suffers from the avoidance of the contract, as that the insane or his heirs do from its validity; and nothing can be more clearly unjust than the application of a maxim or general rule that favors only the interests of the unsound party."[1] In the well marked cases of insanity, in both Civil and Criminal Jurisprudence, "where the insanity of one of the party is perfectly well known to the other, or might have been so, by the exercise of ordinary sagacity," there is no great difficulty in determining the rights and responsibilities of all parties concerned; but in criminal as in civil cases, the difficulty arises where the symptoms are indistinct,—not well marked, "for it often happens, that a person's insanity is not generally known and is not *very apparent*," according to Dr. Ray himself.

In discussing this question, one of the errors of Dr. Ray consists in taking the rulings of a particular court, in an individual case, and considering it a general rule, applicable to every case,—or so applied by the courts in all cases. He does not seem to be aware that judges always confine themselves as closely as possible to the very points made before them in the particular case, and that the reports generally give the case in brief, leaving all but the very points at issue out, or untouched. Mr. Bishop, an able writer upon Criminal law, says: "It is not easy to distinguish the legal principles which are immutable, from those views of facts of insanity which are open to inquiry in each particular case. It should also be remembered that the various phases and manifestations are next to infinite in number. No reason indeed appears, why they may not be even more numerous, and certainly more difficult to be understood, than the diverse qualities and phenomena of sound minds."[2]

While there is so much acknowledged difficulty and doubt surrounding this whole subject among psychologists and medical men generally, in whose especial keeping the question is supposed

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[1] Ray on Insanity, p. 11.

[2] 1 Bishop's Criminal Law, 254.

to rest, can it be reasonably expected that the courts can have well-established and settled rules upon the subject, by which to determine correctly questions of insanity,—that they will take a higher position than the medical profession itself? Is it just, that judges should be censured for not knowing where, in every case, to draw the line of accountability, if those who make the study a specialty are unable to determine it?

When psychologists and pathologists will establish certain rules by which insanity and its extent may be surely known, the courts will not be slow in applying those rules to the relief of every one laboring under the malady, from the punishment of crime. Judge CAPRON, in his charge to the jury in the Huntington case, truly said: "You, doubtless, need not be told, gentlemen, that the law holds no person bereft of reason, responsible for his acts. Deprived of mind, man is but an automatic machine; and human courts in holding him, when thus afflicted, acquit of guilt, do but humbly and obscurely imitate the perfect justice of Deity. Insanity, or mental alienation, has from time immemorial received the attention of the civil and criminal tribunals of all enlightened governments; able professors in all the learned professions, and other profound scholars have studied and examined the structure and functions of the human system, the laws and operations of mind, the relations of each to the other and their mutual influence as a united organism, and have deduced results and demonstrated their correctness by practical illustration and logical deductions from established data; these results the courts have never failed to sanction as soon as their learned authors had agreed among themselves on the subject, and practical experience had attested their certainty. Acting in this spirit, the theories of the schools on the subject of insanity, as approved by the majority of the learned in that department of science, have been from time to time recognized by the courts, and placed among the rules of evidence and law." No special class of cases, perhaps, has occupied so much time in the courts as that of insanity, and no class of cases has been heard and

examined with more patience, anxiety, stern and earnest endeavor to arrive at truth by judges, than when this plea has been made by the defense: so anxious have the courts been, that when any doubt existed as to whether the conviction was right, a new trial has been granted or the old one continued. The case of Abner Rogers was thus continued. The courts are ever merciful. Lord KENYON, in Hadfield's case, said: "Insanity must be made out to the satisfaction of a moral man, meeting the case with fortitude of mind, and knowing the anxious duty he has to discharge; *yet if the scales hang tremulously, throw in a certain proportion of mercy in favor of the prisoner.*"[1]

PARKER, C. J., of New Hampshire, in one of his charges to the grand jury, says: "The public papers, in giving reports of trials, often say, 'the defense was, as usual, insanity,' or make use of some other expression, indicating that this species of defense is resorted to, in desperation, for the purpose of aiding in the escape of criminals from justice. Such opinions are propagated in many instances by those whose feelings are too much enlisted, or whose ignorance respecting the subject is too great, to permit them to form a dispassionate and intelligent judgment, and they have a very pernicious tendency, inasmuch as they excite the public mind, and the unfortunate individual who is really entitled to the benefit of such defense, is thereby sometimes deprived of a fair and impartial trial. They tend to make the defense of insanity odious, to create an impression against its truth in the outset, and thus to bias the mind of the jury against the prisoner, and to induce them to give little heed to the evidence, in the very cases, where the greatest care and attention, and impartiality are necessary for the development of truth, and the attainment of justice.

We all concur in the doctrine of the law, that for acts committed during a period of insanity, and induced by it, the party is not responsible; that when the criminal mind is wanting, when,

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[1] 27 Howell, St. Tr. 1354.

instead of being guided by the reason which God bestowed, the individual is excited and led on by insane fury and impulse, or by the aberrations of a wandering intellect, or a morbid and diseased imagination, or a false and distorted vision and perception of things, punishment should not follow the act as for an offense committed; that when the faculty of distinguishing between right and wrong is wanting, the individual ought not to be held as a moral and accountable agent. As well, nay, much better, might we, as was formerly done in France, institute prosecutions against the brute creation for offences committed by them, and hang a beast for homicide, than to prosecute and condemn a human being who is deprived of his reason; for in such case there is no hope of a restoration to a right mind, and a reinstating of a fellow citizen, who has been once lost to the community, in the rights and affections of humanity. But if we imbibe the idea that instances of insanity are very rare,—that derangement exists only when it manifests itself by incoherent language and unrestrained fury,—that the defense, when offered, is probably the last resort of an untiring advocate, who, convinced that no real defense can avail, will not hesitate to palm off a pretended derangement to procure the escape of his client from merited punishment,—if in this way we steel our hearts against all sympathy, and our minds against all conviction, it is of little avail that we agree to the abstract proposition, that insanity does in fact furnish a sufficient defense against an accusation for a crime.

There are undoubtedly instances where this defense is attempted from the mere conviction that nothing else will avail,—cases where the advocate forgets the high duty to which he is called, and excites a prejudice against the case of others, by attempting to procure the escape of a criminal under this pretence; but such cases are truly rare and usually unsuccessful."

Thus the courts talk and act upon the subject of insanity.

Notwithstanding this relation of the courts to insanity, and their practice under this relation, they have been constantly charged, both by writers on Medical Jurisprudence and by

counsel who defend on this ground, with being prejudiced against the plea of insanity, even when well taken, and that such defense is heard with impatience. It is doubtful whether a single work on Medical Jurisprudence can be found where this complaint is not reiterated against the courts; and it forms the staple in the plea of almost every attorney who may have charge of a defense on the ground of insanity. This charge has been made so often, no one seems disposed to dispute it; yet the complaint is unjust and groundless.

CHAPTER XXVI.

INSANITY—THE MEDICAL WITNESS—THE COURTS.

While, as we have seen, the most candid and able medical men of both continents admit, that comparatively little is known as to the *essential elements* of insanity; it is not surprising that the courts should be troubled in determining who are *non compos mentis*, and that their history on this point should present some conflict,—often only apparent,—of decisions, and that writers upon Criminal law should complain that the medical profession have not given to the courts sufficient data upon which they can act intelligently, or from which can be deduced general principles of law.

The distinguished author and physician, Prof. D. Meredith Reese, of New York, frankly acknowledges that the courts and counsel defer to and depend upon the medical profession for authority upon insanity. He says: "The bench and bar have everywhere deferred to medical testimony, in all questions of forensic medicine; and especially in the jurisprudence of insanity. No man in any civilized country can be confined in an asylum, abridged of his liberty, deprived of the control of his property, or released from his responsibilities to Civil and Criminal law, without the judgment or testimony of medical men, as to the fact of his being *non compos mentis*, or of 'unsound mind,' in the language of the law. The courts and juries everywhere rely upon physicians for their guidance in all such questions. And we owe it to this deference everywhere extended to our profession in these important cases, to see to it, that the administration of justice is not embarrassed by the incompetency of our representatives, for lack of adequate instruction being

included in the training provided in our medical colleges and schools.

But how have we responded to the just demand of the legal profession in this regard? Dr. Pliny Earle justly complains that this 'subject of insanity does not enter into the programme of lectures in any of our leading medical schools. It is safe, perhaps, to assert that not one in ten of the graduates of those schools have ever read a treatise upon mental disorders.' *Indeed, the department of Medical Jurisprudence itself is either wholly ignored in the curriculum of our universities and colleges, or merely appended to some other chair or chairs, by way of formal recognition, and this for the most part* stat nominis umbra.

In Germany, this subject attracts greater attention than in any other country. As early as 1811, the University of Leipsic founded the first professorship of Psychiatrie, which was long filled by the late Dr. Heinroth. Soon after, the establishment of clinical teaching in the asylums was sanctioned by government, and at the instance of the several faculties, attempts have been made to include such clinics among the requisites for graduation, on the rational ground that if physicians are to be intrusted with the treatment of insanity, they should be obliged to study the disease under capable and experienced teachers. It need scarcely be added that, with such opportunities in the German asylums, a multitude of students are found improving them, so that in most of the institutions for the insane in that country, those physicians who have been thus clinically trained are employed as superintendents. It is full time that this subject should receive greater attention in the United States, as it doubtless will do under the enlightened guidance of the American Association of Superintendents, and the American Journal of Insanity. *The demands of our civil and criminal courts all over the land, for competent and intelligent medical testimony, must be met by raising up an army of experts in every department of Medical Jurisprudence, and especially on this important topic of mental aberration.* Else the ignorance of too many physicians, displayed before the

courts and juries, may lead to the undervaluation, if not the rejection of medical evidence in all such cases."[1]

There should, therefore, be no general charge brought against the courts for want of well-settled rules on this subject, until those learned men who have spent so much time in the investigation of the disease, shall have agreed upon something themselves, and demonstrated its truth to the world; a result they admit, as yet unattained. When this is accomplished, the courts will not be slow in putting into practical operation any well-settled tests that may afford a better chance of determining more satisfactorily than at present, who is sane and who is insane. Mr. Bishop, a late philosophical and able writer upon Criminal law, says: "The law of insanity, which seems simple, is in many respects difficult and embarrassing, in the attempt more minutely to unfold it, or apply it to cases arising in practice. In the first place, it is apparent that there are numerous shades or degrees of sanity and insanity, blending with one another, and separated by no very distinct lines. And since the law regards not small things, it follows, that not every little cloud, floating over an otherwise illumined understanding, will exempt from criminal responsibility; nor, on the other hand, will every glimmering of reason, over the dark waters of a troubled mind, subject the unfortunate being to the heavy pains provided for willful wrong doing." He suggests also another difficulty: "Now the Common law,—the atmosphere of our political and social existence; elastic in form, but unchanging in essence; to the dull mind ever varying, and to the clear one ever the same,—is often, from the causes stated, so imperfectly developed in these adjudications, that it is not easy to distinguish the legal principles, which are immutable, from those views of the facts of insanity, which are open to inquiry in each particular case. It should also be remembered, that the various phases and manifestations of insanity are next to infinite in number. No reason,

[1] Report on Moral Insanity in its Relations to Medical Jurisprudence. Extracted from the Transactions of the American Medical Association, p. 13—15.

indeed appears, why they may not be even more numerous, and certainly more difficult to be understood, than the diverse qualities and phenomena of sound minds; and our assurance may well be humbled when we reflect, that what is called the learned world, much more the mass of human kind, is still groping darkly upon the borders of intellectual and moral science. And in considering the decisions of the judges, we must, in each case, take into our view both the errors of facts respecting the disease insanity, and the malformation of idiocy, under which they labored; and also the peculiar circumstances of the case itself, as it appeared in the evidence." Again: "Beside the intrinsic difficulty of the subject, there is for this fact, another principal cause, already alluded to, namely: the peculiar mingling of knowledge from two distinct professions, the medical and legal, which these investigations require. An elementary writer, who should bring to the work transcendent skill in both departments, would do an immense service by a thorough elucidation of the entire question. Our medical brethren fail to give us the instruction we need, because they do not understand our wants, and we, in turn, do not succeed in presenting the legal view in a manner to be rightly apprehended by them. Dr. Beck seems to have been fully conscious of this difficulty. Dr. Ray, on the other hand, in his excellent and useful volume, has undertaken to treat of the legal branch, with the medical; and he has most soundly cudgeled the judges, on account, chiefly, though perhaps not wholly, *of his own failure to understand them.* When they, for example, have laid down a doctrine in reference to the particular facts under consideration, he has taken the doctrine in a general sense; and then, by representing how far from just it is when applied to other circumstances, not under consideration, has shown up the judges, whom he has not intended to treat unfairly, in a very unfavorable light. Thus he has made various adjudications of the courts, on this subject, appear to be bundles of inconsistencies and absurdities; and the law, in many respects, as practically expounded, any thing but just and reasonable. And we

need not wonder at this, when we reflect how difficult it is for men in any one profession to comprehend what belongs to another, with which they are entirely unfamiliar."[1]

Dr. D. Meredith Reese says: "The profession of law, in view of our reciprocal relations and mutual responsibilities, are entitled to an intelligible explanation, if not a specific definition, as well as some reliable test, on which they and we can rely, as characterizing those forms and degrees of insanity which are to be recognized as exempting from responsibility to the laws of the land, especially in criminal cases. It is only in the absence of any medical definition or test, our profession having failed to furnish either, that the bench has been appealed to by the bar for such definition or test. Hence, the recorded decisions of the courts in every country have, with singular uniformity, concurred in the 'knowledge of right and wrong,' or the 'knowledge that the act was contrary to the laws of God and nature,' at the time of its commission, as the definition and test of *sanity* for the guidance of juries. But many in our profession have been ever remonstrating against these legal decisions as defective and erroneous, and alleging that such 'knowledge' is often possessed by the insane, who are unquestionably such. Still, however, we declare ourselves wholly unprepared to lay down any other or better rule of judgment; nor is there any other definition or test, upon which the medical profession have ever agreed. Our highest authorities seem to content themselves with denying that any definition is practicable, or any test conclusive, although every medical sciolist and tyro expects his *ipse dixit* to be infallible, and the bench, the bar, and the jury are all profoundly to cower before a medical certificate of insanity, and the dictum of a professional man that the solemn judgment of the fifteen judges of Great Britain and the House of Lords, as to irresponsible insanity, is 'absurd and nonsensical,' must become the law of the land."

It is not easy to over-estimate or to exaggerate the importance

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[1] 1 Bishop's Criminal Law, 254.

of the subject;—the great difficulties that surround it,—its bearing upon personal liberty and life,—the rights of property and the safety of society,—all enhance the necessity of approaching insanity with a true appreciation of the strength of the ramparts behind which it is intrenched.

What position then can be conceived fraught with more difficulties than that of the medical witness and courts of justice, on this *vexata quæstio*. The court depends mostly if not altogether upon the medical witness, who must sustain the responsibility. The following paragraph is from Dr. Reese:

"There is assuredly no more important or responsible position in which any medical man can be placed, than when called to be examined before a legal tribunal in a case of this character. Nor is there any duty so difficult to perform, without special preparation, by a cautious and diligent investigation of the individual case, and a full knowledge of its history, its etiology, its symptomatology, and, in short, its pathological phenomena, with the periods and order of their development, together with all the morbid perversions, intellectual, moral, or instinctive, which he can observe, or otherwise authenticate. Nor should an opinion ever be given by a medical man, in any doubtful case, on a cursory or brief examination, nor without such special preparation and repeated interviews as to protect him from his double liability to imposition and error. The insanity may be, and often is feigned so skillfully as to deceive the very elect; while, where it exists, it is sometimes so adroitly concealed by ingenuity and artifices which insanity itself can alone invent, and which none but professional experts can readily detect, and these only after oft-repeated and continuous vigilance and skill. Hence, we can not be too strongly impressed with the complicated difficulties and fearful responsibilities involved in such professional positions."

To the elementary difficulties already noticed, which the medical witness carries with him to the stand, are to be added the ignorance and prejudice of relatives; who are either over-sensitive,—not willing that their friend should be pronounced insane,—

or, on the other hand, desirous that he should be declared imbecile or insane, to effect some selfish purpose. The court looks on, and hears with jealousy and doubt, perhaps, what is said, thinking that the witness may not be able to enlighten it upon a subject, where theory and false philosophy are so apt to sway the mind of a witness,—even of good intention, and who really desires not to mislead the court, but to come to correct conclusions; not, however, fully appreciating the insurmountable obstacles in his way,—the various aberrations,—reflections of the glass through which he attempts to examine the subject,—and that he may be mistaken, or become lost in the mazes of uncertainty that surround the subject. That the courts have at times been illiberal toward the witness, who, anxious to discharge a solemn and thankless duty, appearing in answer to a subpœna without inclination or reward, is not to be denied or justified. Lord Campbell, Lord Chief-Justice of England, in the Bainbrigge case, alluding to the evidence of three physicians who had recorded their opinion in favor of the insanity of the testator, observed, after they had retired from the witness box: "The medical men who have just been examined need not be detained any longer?" Mr. Keeting.—"Certainly not, my lord;" and upon Sir A. Cockborn assenting, Lord Campbell remarked: "Let it be fully understood, on both sides, that the medical men may take their departure;" and addressing the three physicians, his lordship continued: "You may go home to your patients, and I wish you may be more usefully employed than you have been here!" Again to the jury he said, when dwelling upon the medical testimony: "We have had, during this trial, the evidence of three medical witnesses, and I think they might as well have stayed at home, and have attended to their patients." This occurred in one of those great will cases, which the English courts are called upon occasionally to determine. Mr. Bainbrigge was immensely wealthy; which wealth was disposed of by will. Upon the issue of the case depended the vast property. The trial occupied more than a week; some of the most illustrious advocates and equity lawyers of England were

engaged in conducting the suit. The only question was as to the sanity or insanity of the testator. The evidence, as usual, was very conflicting; the assumed facts upon which the alleged insanity was based were conflicting. The medical faculty in the locality where the case was tried, could throw no light upon the subject, and it was therefore deemed necessary to subpœna three of the best London physicians, who, for experience, science and sagacity, were supposed to be unexcelled. They heard the testimony, and as experts, stated to the best of their judgment, what was the condition of the testator's mind,—whether or not he, when the will was executed, was of a healthy, sound and disposing intellect. The whole weight, therefore, of this great case, covering millions, rested upon the shoulders of these three men! And because they were not competent to make the matter clear, and solve the problem, they were, as we have seen, driven out of court amid contemptuous jeers. Owing to some informality, the verdict of the jury, which was against the will, on the ground of insanity, was set aside, and the case was to be tried a second time, and two of these same medical witnesses were subpœnaed to appear and give evidence again before the same court. In this way the medical witness has been driven out of court for not unravelling to the satisfaction of the judge, what no human being, however learned, is able to make clear; and then dragged back again to be put to the rack, for not revealing a secret, so tightly locked up amid the wonderful *arcana* of mind.

A Lord High Chancellor of England, on one occasion, while he expressed no disrespect for the medical witnesses, said: "His experience taught him there were very few cases of insanity in which any good came from the examination of medical men. Their evidence sometimes adorned a case, and gave rise to very agreeable and interesting scientific discussions; but after all it had little or no weight with the jury." This extract shows how medical evidence, on the question of insanity, is looked upon by the best minds of the legal profession. They should not blame the medical witness for not doing what is impossible, unless the

witness arrogates to himself a knowledge of the subject. If he pretends to explain and mark out all the boundaries that define and separate the limits of responsible intelligence and irresponsibility, where the lives of a community or the fate of property depend upon these limits and bounds, he must do it clearly, or be disgraced in the eyes of intelligent men. The error is most frequently in the witness himself pretending to know what is not known, either by himself or others. He should be able and willing to tell without a blush for his profession, or without confusion, what, and how much is still unknown and unsettled in this department of medical inquiry. Then he will be understood, maintain his own self respect, and secure that of the court and bar.

Under the unsettled and confused state of this question generally, it is not to be expected that any definition of insanity can be given that will be satisfactory. Every writer attempts it, and in his turn fails. Taylor says: "It is impossible, in Medical Jurisprudence, to give any consistent definition of insanity. A medical witness who ventures upon a definition will generally find himself involved in numerous inconsistencies. No words can possibly comprise the variable characters which this malady is liable to assume. Some medical practitioners have attempted to draw a distinction between insanity and unsoundness of mind!"[1]

Another writer on this subject says: "The term insanity, like many other words which we are in the constant habit of using, seems to have lost its original meaning, and to be now generally taken in too restricted a sense, implying those deviations from the natural and healthy condition of mind, which consist in excessive and disproportioned activity of all or of some of its faculties, and being rarely if ever applied to those states of mind characterized by deficient energy of action, whether original or acquired. The term insanity, therefore, does not include all

[1] Medical Jurisprudence, p. 615.

possible deviations from the sound and healthy condition of the mind, and is therefore inapplicable to the present purpose."[1]

Dr. Geo. B. Wood says: "Insanity is a general term, including all departments of the intellectual and moral functions, not forming some other disease, nor an ordinary physiological result of the time of life. The delirium of fever, the hallucinations of hysteria, the temporary cerebral irregularities from excessive pain, or functional disturbance in various parts of the body, the irrational confidence and hopes of phthises, the equally irrational depression of dyspepsia, the stupor of apoplexy, and the imbecility of old age, can scarcely be considered as falling within the term. Yet it must be acknowledged that the definition is imperfect and perhaps necessarily so, as our ideas of insanity are somewhat indefinite, and when precision is wanting in our conception, it can not be given in words."[2]

Dr. Wood's list of the symptoms of insanity, includes every possible phase and condition of both disease and health. He says: "The question of the existence of insanity in a particular case is often difficult of solution; and sometimes it is impossible to come to a positive conclusion, because no precise line can be drawn between sanity and insanity, the two conditions running into each other by insensible gradations."[3]

Again: "It should be remembered, in our inquiries as to the existence of insanity, that patients often have lucid intervals, in which it is difficult or impossible to detect any trace of the disease; and a decision therefore should be avoided, until they have been seen on different occasions; and sometimes it is necessary for the physician, in forming his judgment, to rely upon the testimony of others. In relation to moral insanity and insane impulse, a just decision is often still more difficult than in cases of monomania, with one steady illusion. Men so often act

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[1] Guy's Medical Jurisprudence, p. 258.
[2] 2 Wood's Practice of Medicine, 732–33.
[3] Ibid, 757.

insanely under the influence of misguided opinion and excited passion, that the physician should be very cautious in coming to a conclusion. When the tendencies of the irregular feeling or impulse are materially to injure the person of others, or of the affected individual himself, the judgment should, perhaps, incline to insanity, so that the proper guard may be exercised; if the tendency be quite innocent, it may, without harm, pass for mere eccentricity of feeling. The question as to the origin of the peculiar state of feeling, and the circumstance of its first appearance, should, in this form of insanity, as in monomania, be allowed some weight."[1]

Dr. Gilman says: The first difficulty the medical witness encounters, is the definition of insanity. "The prudent course is to decline, saying to the court that it is impossible to comprehend all the phenomena of insanity within the limits of a definition. If, however, you desire to give one, be sure that it is the result of careful and patient thought. If you are quite sure that you can recollect a definition which satisfied your mind, in your study, you may give it; but rely upon it, if you try to extemporize a definition, it will be a bad one. The best I have been able to make is this: "Insanity is a disease of the brain, by which the freedom of the will is impaired."[2]

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[1] 2 Wood's Practice of Medicine, 758.

[2] The Relations of the Medical to the Legal Profession, p. 20.

CHAPTER XXVII.

INSANITY IN ITS LEGAL RELATIONS.

We proceed to the consideration of the principal points involved in the legal investigation of insanity, with the fact before us, that the men of greatest eminence at the bar and in medicine, unite in deploring the want of more definite knowledge on the subject; and consequently the absence of well-defined and settled first principles to regulate the judgment of the courts, and the conduct of counsel and witnesses. Neither court or counsel can feel the want of settled principles more than the medical witness. Complexity, contradiction, difficulty, doubt and obscurity are the rules, if they may be so called, that guide him! These alone are certain, and present in every case.

All attempts to deduce general principles in regard to Medico-legal evidence on this subject of insanity, therefore, should be made with humility and distrust.

There can be no settled rules for the courts or for the witness in these cases, from the very nature of the subject. We have seen that medical men have no definition or rules that fix and confine insanity, any more closely than the normal mind is defined or bounded; and on the court side of this question the twelve judges say to the House of Lords: "They deem it at once impracticable, and at the same time dangerous to the administration of justice, if it were practicable, to attempt to make minute application of the principles involved in the answers given by them to their lordship's questions." In their answer they, therefore, narrowly and closely confine themselves to the abstract question proposed. Mr. J. Maule delivered a separate opinion on this occasion, and

goes even further in declining to lay down any precise rule which should serve as an unbending precedent. In the debate which called out the expression from the judges, Lord Lyndhurst, the Lord Chancellor who had tried Offord, (5 Car. & Payne,) expressed himself with great doubts as to the propriety of undertaking to make a universal rule or declaration of law in the matter.

But when is Medical Evidence needed upon this question, and what has been the course adopted by the courts, in regard to it?

The occasions upon which Medical Evidence is required in courts of law on questions of insanity, are:

1. When the plea of insanity is urged in extenuation of crime.

2. When attempts are made to invalidate the legal operation of testamentary disposition of property, on the ground of mental incompetency.

3. When legal proceedings are instituted to invalidate a marriage contract, on the plea of insanity and imbecility.

4. Cases where medical men are called upon to certify to the existence of insanity, justifying an interference with the person of the lunatic, and depriving him of his free agency, either for the purpose of placing him under treatment, or protecting him from the commission of acts of violence to himself or others.

In looking over the records of the courts for the last two hundred years, it would be singular if we did not find much confusion and vacillation on the subject of insanity.

At an early day, so great was the difficulty felt to be, in determining where the line should be drawn, it was held that no degree of insanity should be an excuse for crime, but *absolute dispossession* of the free and natural agency of the mind. It was no defense that the party was partly insane, or insane on some subjects. This was the rule laid down by Lord Hale. He says: "It is the condition of many, especially melancholy persons, who, for the most part, discover their defect in excessive fears and griefs, and yet are not wholly destitute of the use of reason; but this partial insanity seems not to excuse them in the committal of any capital offense. Doubtless, most persons who kill

themselves are under a partial degree of insanity when they commit these offenses, and it is very difficult to define the invisible line that divides perfect from partial insanity; but it must rest upon circumstances, to be duly weighed by the judge and jury, lest, on the one hand, there be an inhumanity toward the defects of human nature; or, on the other, too great an indulgence shown to great crimes."[1]

Collinson says: "There must be an absolute dispossession of the free and natural agency of the human mind. The prisoner must have been incapable of distinguishing between good and evil, and of comprehending the nature of what he was doing."[2] Shelford, from a number of adjudged cases deduces the following rule: "If a person, liable to partial insanity, which only relates to particular subjects or notions, upon which he talks and acts like a madman, still has as much reason as enables him to distinguish between right and wrong, he will be liable to punishment which the law attaches to his crime." He cites Lord Ferrer's case, 10 Howell's State Trials, 947; Arnold's case, 16 Howell's State Trials, 764; Parker's case; 1 Collinson on Lunacy, 477; Bellingham's case, 1 Collinson, 635; Offord's case, 5 Car. & Payne, 168; Bowler's case, 1 Collinson, 673.

Sir John Mitford said on Hadfield's trial: "Because there is a natural impression on the mind of man, of the distinction between good and evil, which never entirely loses hold of the mind, whilst the mind has any capacity whatever to exert itself, nothing but total and absolute debility deprives the mind of any man of that. If conscious of the act, as the result of design and contrivance, and of the consequence of the act, is there not a moral sense, which indicates criminal responsibility?"[3]

In 1723, Mr. Justice Tracy, proceeding upon the common error, that the derangement must be total in its character,

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[1] 1 Hale's P. C. 29, 30.

[2] Collinson on Insanity, 473.

[3] 27 Howell's State Trials, 1290.

manifesting itself in wild, ungovernable, and incongruous actions, or in stupid imbecility, and that a person can not appear like other men in most or many respects, ordinarily, and yet be the subject of insanity on some particular matters, said: "A man to be insane, must have no more reason than an infant, a brute or a wild beast." Another judge proposed a *knowledge of the multiplication table* as a test of legal sanity.

But when it began to be suspected that an individual might be insane on one particular subject,—that he might be a monomaniac,—subject to a particular delusion,—and yet appear perfectly natural and regular in regard to every other,—both medical and legal men seemed to feel the necessity of a different rule than that requiring absolute dementia.

To the great Erskine,—a lawyer,—more than to any other man, perhaps, is the world indebted for having emancipated the courts from the old stern rule, and having incorporated into our laws the principle that a person might be insane or deluded on one subject and apparently sound and regular,—having a knowledge of right and wrong,—on all others. This doctrine he laid down in the celebrated Hadfield case, where he was for the defense. He thus first applied successfully in law, that which physicians had claimed for some time before.

Erskine's main propositions were, that "the most difficult cases, are where reason is not wholly driven from her seat, but distraction sits down upon it along with her, holds her trembling upon it and frightens her from her propriety. Such patients are victims to delusions of the most alarming description, which overpower the faculties and usurp so firmly the place of realities as not to be dislodged and shaken by the organs of perception and sense. Delusion, therefore, when there is no phrensy or raving madness, is the true character of insanity, and when it can not be predicated of a man standing for life or death for crime, he ought not to be acquitted." And again: "To deliver a lunatic from responsibility to criminal justice, above all, in a case of atrocity, the relation between the disease and the act should be apparent;

the delusion and act must be connected. I can not allow the protection of insanity to a man who exhibits only violent passions and malignant resentments acting upon real circumstances, who is impelled to evil from no morbid delusion, but who proceeds upon the ordinary perceptions of the mind."

It will be remembered, that Hadfield was tried for shooting at King George the Third, in Drury Lane Theatre, in the year 1800. The effort was ineffectual; but as the attempt was itself high treason by the law of England, he was tried for his life before the Court of King's Bench. At his own request, Mr. Erskine, the ablest advocate at the English bar, defended him, being assigned by the court. In selecting Mr. Erskine, Hadfield showed great judgment, and seemed to appreciate his danger. The defense made by Erskine, was almost superhuman. He threw more light upon the dark subject of insanity, than all that had been said or written on the subject before. Hadfield having been a soldier in the army, had received a dangerous wound on the head which made him insane for a time, and he was discharged from the service. Subsequently he was subject to a partial derangement every year, during the spring and summer months, which made him imagine that he held intercourse with the Deity, and was himself a Saviour like JESUS CHRIST. His actions also during these periods were frequently the most extravagant and irrational. He would threaten to kill one of his children, of whom he was ordinarily very fond, saying he was commanded to do so by the voice of God; had his wife not prevented it, he would have probably, at one time, executed his intention. Between this attempt upon the life of his child and his attempt upon the life of the king, he frequently talked in an incoherent and blasphemous manner. He was under a delusion, that like the Saviour he must fulfill his mission by giving up his life, but that he was not permitted to take it himself, so he must perform some act which would subject him by law to capital punishment. So he procured a pistol, and having carefully loaded it, he repaired to the theatre, and took a station where the king would

be in full view as he entered. Having waited nearly an hour for the king, when he came, he rose with the rest of the audience on the king's entrance, and taking deliberate aim, fired, but with no effect, the slugs going above and below the king's person. He was immediately arrested, making no attempt to escape; he said *he knew perfectly well that his life was forfeited;* that he was tired of it, and regretted nothing but the fate of his wife; that he did not intend any thing against the life of the king; he knew the attempt only would answer his purpose. *He showed no appearance of derangement,—spoke with calmness.* Many witnesses testified that in his whole conduct in the theatre, they witnessed *no mark of mental aberration.*

In many respects this case is very contradictory in its character. The plea of insanity succeeded; and yet there was much appearance of cool calculation, and slow, patient deliberation; reasoning on the whole transaction correctly from beginning to end;—evincing a clear understanding of the crime and the punishment,—even a minute knowledge,—for he said he knew the *attempt* alone was sufficient to bring upon him the penalty of death. He appreciated fully the destitute condition of his family, and the necessity of an able advocate. He was, nevertheless, undoubtedly insane upon one point, to wit: that he was a Saviour like CHRIST; and what he did was to save mankind, even to the taking of the life of the king, and was right. He wished to kill the king, and yet said he did not intend any thing against his life. Altogether, the case of Hadfield is an important one, and worthy of study.

To illustrate how an individual might be insane on one subject and reason correctly on all others, so far as observation could determine, Erskine related the following circumstance. "I well remember," says he, "examining, for the greater part of a day, in this very place, (the Court of King's Bench.) an unfortunate gentleman, who had indicted a most affectionate brother, together with the keeper of a mad-house at Hoxton, for having imprisoned him as a lunatic, whilst, according to his evidence, he was in his

perfect senses. I was, unfortunately, not instructed in what his lunacy consisted, although my instructions left me no doubt of the fact; but not having a clue, he completely foiled me in every attempt to expose his infirmity. You may believe that I left no means unemployed which long experience dictated; but without the smallest effect. The day was wasted, and the prosecutor, by the most affecting history of unmerited suffering, appeared to the judge and jury, and to a humane English audience, as the victim of the most wanton and barbarous oppression; at last Dr. Sims came, who had been prevented by business, from an earlier attendance; from him I soon learned that the very man whom I had been above an hour ineffectually examining, and with every possible effort which counsel are in the habit of exerting, believed himself to be the *Lord and Saviour of mankind;* not merely at the time of his confinement, which was alone necessary for my defense, but during the whole time he had been triumphing over every attempt to surprise him in the concealment of his disease. I then affected to lament the indecency of my ignorant examination, when he expressed his forgiveness, and said with the utmost gravity and emphasis, in the face of the court: 'I am the CHRIST;' and so the cause ended."

Another illustration of partial insanity was given by Mr. Erskine on the same occasion, from Lord Mansfield. "A man by the name of Wood," said Lord Mansfield, "had indicted Dr. Monroe for keeping him as a prisoner, when he was sane. He underwent the most severe examination, by the defendant's counsel, without exposing his complaint; but Dr. Battye, having come upon the bench by me, and having advised me to ask him what had become of the princess whom he had corresponded with in cherry-juice, he showed in a moment what he was. He answered, that there was nothing at all in that, because, having been, (as every body knew,) imprisoned in a high tower, and being debarred the use of ink, he had no other means of correspondence but by writing his letters in cherry-juice, and throwing them into the river which surrounded the tower, where the princess

would receive them in a boat. There existed, of course, no tower, no imprisonment, no writing in cherry-juice, no river, no boat, but the whole the inveterate phantom of a morbid imagination." "I immediately," continued Lord Mansfield, "directed Dr. Monroe to be acquitted; but this man Wood, being a merchant in Philpot Lane, and having been carried through the city in his way to the mad-house, he indicted Dr. Monroe over again, for the trespass and imprisonment in London. Knowing that he had lost his cause by speaking of the princess at Westminster, and such is the extraordinary subtlety and cunning of mad-men, that when he was cross-examined on the trial in London, as he had successfully been before, in order to expose his madness, all the ingenuity of the bar, and all the authority of the court, could not make him say a single word about the topic which had put an end to the indictment before, although he still had the same indelible impression upon his mind, as he signified to those who were near him; but conscious that the delusion had occasioned his defeat t Westminster, he obstinately persisted in holding it back. And it was only by proving the particulars of the former examination, that Dr. Monroe established his innocence of the charge."

In this way did Erskine carry his defense through successfully; satisfying the court and jury that a person may have great judgment, caution and prudence,—that he may appear to the world to be sane, and baffle the ablest counsel in demonstrating the contrary, and still be absolutely insane upon one or more subjects.

Mr. Noyes related the following fact, in his argument in the Huntington case: "I know an accomplished and intelligent lady, who thought her feet were made of glass; she was clearly insane in regard to that subject. I have seen her, at the dinner table, move the chairs all out of the way, for fear her feet would be smashed."

The Rev. Dr. Sprague, in his "Annals of the American Pulpit," relates the following facts in the life of the Rev. Daniel Haskell, a literary graduate of Yale College, a theological graduate of

Princeton, and was for eleven years settled over a church in Burlington, Vermont, which office he held with general acceptance, when he was chosen president of Vermont University. After holding this position a short time he became deranged, from what appeared to be a metastasis of rheumatism. He was separated for many years from his family, wandering from State to State, often placed in insane institutions, without relief.

His peculiar, partial insanity or delusion was, that he was, as he supposed, "shut out from a world of hope; a wanderer, where, he could not tell; save only of this, that he had not passed the judgment. At the hight of his malady, there was a time when he supposed himself to have passed out of this state of being; he knew it, and from this fact all hope for him was gone forever. Christ and his salvation were only offered to sinners in the world where he once was;—he would not suffer himself to be deceived by false appearances;—he would not believe a lie. For a time he was incapable of business or enjoyment,—his flesh wasted away, and he had the look of despair at times, but not always. In his latter years he was cheerful, and though he did not acknowledge any change of opinion, he lost, in a measure, the sense of his miserable condition, and found it almost impossible to realize what he supposed to be true."

Yet, while this delusion held its position inflexibly, all the other intellectual operations were clear, strong, correct and active. He would reason and investigate correctly. He was engaged by schools and lyceums to lecture, and his addresses were able and instructive, and often sought after for publication. Associated with another person, he published the Gazetteer of the United States, and afterward edited McCullock's Geographical Dictionary. He also was an adept in mechanism, constructing apparatus for schools, etc.

Dr. Cox, of Brooklyn, who was for some years the pastor of Mr. Haskell, says: "He was a man of great strength and soundness of mind,—with this single exception; that he was distinguished for his attainments in science, literature, general read-

ing, well digested thought and theological erudition; that he was a person of deep and genuine piety; beneficent and useful in the whole tenor of his life. He was a profound mathematician and astronomer, and occupied much of his leisure time, in the almost twelve years that I was his pastor, as well as before, in exploring the wonders of that magnificent science, in preparing and manufacturing globes, planetariums, instruments, and learned helps for its prosecution; in studying history, chronology and antiquities, always engaged, and seeming to abhor idleness." "His words were fine, his conversation rather reserved. He seemed to court solitude rather than society."

Dr. Cox says of the peculiar form of the delusion under which Haskell labored: "He thought he was dead, since some definite epoch gone by; that he was no longer a prisoner of hope or probationer for eternity; that it was in some other world, not this, he formerly lived; that he was a rebel,—selfish, disobedient, antagonistic to his God; and that God had removed him into another state, where he was then remaining, although it was a mystery! Hence he would not pray. It would be wickedness and impiety for him to attempt it. Sometimes Mr. Haskell would forget his mania, interested in some object or topic of conversation. But any reference made to it, or recollection of it by himself, at once restored his melancholy consistency, as the solemn contraction of his countenance always evinced. Once, in conversation, it suddenly thundered, after a very vivid flash of lightning, interrupting the course of thought and speech. As he was thus abruptly stopped in the midst of cheerful talk, one of the company asked him if that was not very much like real thunder and lightning. The absurdity struck him, and he said with an involuntary smile: 'It seems very like what I remember in the world where I once was.' His mania was quite incurable. It was indeed the most perfect illustration of monomania, or insanity on one point only, that I ever knew; on all other subjects, especially when he forgot, he was sane, sensible, learned, instructive and engaging. He loved his friends, and

seemed ever to have on his spirit a clear and subduing sense of the ubiquity and supremacy of God."

There can be no doubt that Mr. Haskell was completely insane on one subject, and at the same time, clear, logically correct, and strong in all his other intellectual phenomena; with a conscience tender, enlightened and morally sound. Dr. Hough, professor in Middlebury, attests all of this.

How can cases of this kind be accounted for on the theory of the individuality of the mind and the unity of consciousness?

CHAPTER XXVIII.

THE COURTS—PARTIAL INSANITY—DELUSION.

THE term "partial insanity," as used by writers upon insanity, does not seem to have a fixed and definite meaning. One class declare, while they admit that there is a state of the mind called monomania, that the mind being a unit, there is no such condition as partial insanity; that if the mind is diseased at all, it is unsound as a whole in every respect.

The effort of Erskine, therefore, though successful in the Hadfield case, did not render his position satisfactory and conclusive in the opinion of some, so the discussion still goes on.

Dr. Gilman, in answer to a question by Mr. Noyes, on the Huntington trial, said: "I pronounce Huntington insane. I make no distinction. I do not believe in a man being partially insane. There is a state of things which is called *monomania*, but I call him insane. According to Lord Brougham, the mind is a *totality*." On the other hand, Dr. Willard Parker, as we have seen, on the same occasion, while agreeing with Dr. Gilman in most of his views, differed with him in this, holding that there was such a state as "partial insanity." The English medical authority is also divided on this question, consequently the legal state of the question is somewhat unsettled.

The term "delusion," so much used by judges and others, seems sometimes to mean complete insanity, but generally only partial or limited dementia. The meaning of the term is not settled. In the case of Drew *v.* Clark, Sir John NICHOLL says: "The true test of insanity, I take to be the absence or presence of what, used in a certain sense, is comprehended in a single term, viz:

delusion. In the absence of any thing in the nature of delusion, the supposed lunatic is, in my judgment, not properly insane." Lord DENMAN also says, in Regina *v.* Smith: "To say a man was irresponsible, without positive proof of any act to show that he was laboring under *some delusion*, seemed to him to be a presumption of knowledge, which none but the great Creator could himself possess."

Mr. Chitty says: "The test of insanity, where there is no phrensy or raving, is the absence or presence of delusion; and delusion exists whenever an individual once conceives something extravagant to exist, which has no existence, and when he is incapable of being reasoned out of that absurd conception. In criminal cases, therefore, the question is simply adapted to the comprehension of every juryman, whether at the time that the act was committed, the prisoner was incapable of judging between right and wrong, and did not then know that the particular act was an offense against the law of God and nature."

Lord BROUGHAM defines a delusion to be "a belief of things as realities, which exist only in the imagination of the patient." Sir John NICHOLL says: "A delusion is a belief of facts which no rational reason would have believed." To this last definition Lord BROUGHAM takes exception, and says it gives a *consequence* for a definition. Mr. Winslow gives still another definition, which he thinks is free from the objections to which the above are obnoxious. "A delusion," he says, "is a belief in the existence of a something extravagant, which has, in reality, no existence, except in the *diseased* imagination of the party, and the absurdity of which he can not perceive, and out of which he can not be reasoned." Then again, it has been held that delusion was not essential to insanity. Lord CAMPBELL, in the celebrated Bainbrigge will case, said: that "*Mania may exist without delusion.*" In extreme cases, the person being insane on all subjects, there is no special delusion, but a general one on matters of reason. The test, therefore, of a delusion, does not necessarily differ from that of partial insanity, and it is about as indefinite;

nor is it improbable that the courts have generally intended the one for the other.

There has, perhaps, been less confusion on this subject in the American courts, than in those of England. There, the regard for old precedents and old opinions are a little stronger than in this country. Our courts, therefore, more readily adapt themselves to the equity and circumstances of the case than in England, though governed, to a great extent, by the decisions of that country.

This point was ably discussed by W. H. Seward and John Van Buren, and thoroughly considered by the court, in the case of Freeman *v.* The People, 4 Denio, R. 27. In this case the court below charged the jury, impanneled to try whether the prisoner, indicted for murder, was at the time of trial insane, that they were to decide, "whether the prisoner knew right from wrong, and if he did not, then he was to be considered insane." This charge, it was claimed, was erroneous. BEARDSLEY, C. J., held: "That a state of general insanity, the mental powers being wholly prevented or obliterated, would necessarily preclude a trial; for a being in that deplorable condition can make no defense whatever. Not so, however, where the disease is partial, and confined to one subject, other than the imputed crime, and contemplated trial. A person in this condition may be fully competent to understand his situation in respect to the alleged offense, and to conduct his defense with discretion and reason. Of this the jury must judge: and they should be instructed, that if such is found to be his condition, it will be their duty to pronounce him sane. In the case at bar, the court professed to furnish a single criterion of sanity, that is, a capacity to distinguish between right and wrong. This, as a test of insanity, is by no means invariably correct; for, while a person has a very just perception of the moral qualities of most actions, he may, at the same time, as to some one in particular, be absolutely insane, and consequently, as to *this* be incapable of judging accurately between right and wrong. If the delusion extends *to the alleged crime*, or the contemplated trial, the party manifestly, is not in a

fit condition to make his defense, however sound his mind may be in other respects; still the insanity of such a person being only partial, not general, a jury, under a charge like that given by the court below on this case, might find the prisoner sane, for in some respects he would be capable of distinguishing between right and wrong. Had the instruction been, that the prisoner was to be deemed sane, if he had a knowledge of right and wrong in *respect to the crime* with which he stood charged, there would have been but little fear that the jury could be misled; for a person who justly apprehends the nature of a charge made against him, can hardly be supposed to be incapable of defending himself in regard to it in a rational way. At the same time, it would be well to impress distinctly on the minds of jurors, that they are to gauge the mental capacity of the prisoner, in order to determine whether he is so far sane as to be competent in mind to make his defense, if he has one; for, unless his faculties are equal to that task, he is not in a fit condition to be put on his trial. For the purpose of such a question, the law regards a person thus disabled by disease, as *non compos mentis*, and he should be pronounced unhesitatingly to be insane within the true intent and meaning of this statute.

Where insanity is interposed as a defense to an indictment for an alleged crime, the inquiry is always brought down to the single question of a capacity to distinguish between right and wrong at the time when the act was done. In such case, the jury should be instructed that, 'it must be clearly shown that, at the *time* of committing the act, the party accused was laboring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the *act* he was doing; or if he did know it, that he did not know he was doing what was wrong. The mode of putting the latter part of the question to the jury, on these occasions, has generally been, whether the accused, at the time of doing the act, knew the difference between right and wrong; which mode, though rarely, if ever, leading to any mistake with the jury, is not deemed so accurate, when put

generally and in the abstract, as when put with reference to the party's knowledge of right and wrong in respect to *the very act* with which he is charged.' This is the rule laid down by all the English judges but one, in the late case of McNaghton, while pending in the House of Lords. 10 C. & F. 210. In the case of Oxford, Lord DENMAN, C. J., charged the jury in this manner: 'The question is, whether the prisoner was laboring under that species of insanity which satisfies you that he was quite unaware of the nature or character and consequences of the act he was committing; or, in other words, whether he was under the influence of a diseased mind, and was really unconscious, at the time he was committing the act, that it was a crime.' The insanity must be such as to deprive the party charged with crime, of the use of reason in regard to *the act* done. He may be deranged on other subjects, but if capable of distinguishing between right and wrong in the particular act done by him, he is justly liable to be punished as a criminal. Such is the undoubted rule of the Common law on this subject. Partial insanity is not, by that law, necessarily an excuse for crime, and can only be so where it deprives the party of his reason in regard to the act charged to be criminal. Nor, in my judgment, was the statute on this subject intended to abrogate or qualify the Common law rule. The words of the statute are: 'No act done by a person in a state of insanity can be punished as an offense.' The clause is very comprehensive in its terms, and at first blush, might seem to exempt from punishment every act done by a person who is insane *upon any* subject whatever. This would, indeed, be a mighty change in the law, as it would afford absolute impunity to every person in an insane state, although his disease might be confined to a single and isolated subject. If this is the meaning of the statute, jurors are no longer to inquire whether the party was insane 'in respect to the very act with which he is charged,' but whether he was insane in regard to any act or subject whatever; and if they find such to have been his condition, render a verdict of not guilty. But the statute is not so understood by me. I

interpret it as I should have done if the words had been 'no act done by a person in a state of insanity, in *respect to* such act, can be punished as an offense.' The act, in my judgment, must be an *insane act*, and not merely the act of an insane person. This was plainly the rule before the statute was passed, and although that took place more than sixteen years since, I am not aware that it has, at any time, been held or intimated by any judicial tribunal, that the statute had abrogated, or in any respect modified, this principle of the Common law."

The above opinion was given on the construction of a New York statute; yet, as the statute is based on the Common law, the decision has a general bearing and application, and may be considered the Common law rule.

It is doubtful whether the rule of the Common law has been as uniform as intimated by the court; still, at present this is undoubtedly the rule of law in England and this country, and has been since the trial of Hadfield, that if the person is sound on every other subject, and insane on the one under which the crime was committed, he is irresponsible.[1] Or, as settled in the Freeman case; if the party is insane or laboring under a delusion on one subject, and commits a crime not connected with such delusion, he is responsible.

If the act complained of has been committed under an insane condition of mind in regard to the particular act done; in other words, if the act was an insane act, the prisoner is allowed to go unpunished, though in every other respect, in regard to all other acts, he may appear to be perfectly sane. On the other hand, if he is insane on all other questions, and rational on the one complained of,—if such a condition is possible,—he is to be punished. The whole question depends upon the fact, whether he fully comprehended the moral and civil wrong of the transaction, *in regard to the act done.*

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[1] Reg. *v.* Renshaw, 11 Jur. 615, 616; Lord Ferrers' Case, 19 St. Tr. 886—946, 947; Hadfield's Case, 27 Howell's St. Tr. 1281—1310; 4 Barr. 264; Martin's Case, Shelford on Lunacy, 465.

This rule, though much complained of, is nevertheless a reasonable one under the present state of the subject, and should be practiced upon until the revelations of physiology, pathology, or psychology can show it to be wrong, by substituting a better one,—a thing not yet accomplished. Nor will theoretical reasoning remove the difficulty, upon the assumption that the mind being a unit, it can not be affected in part,—that all must suffer together,—that all parts are shadowed by a cloud, however small, that may chance to pass over one portion of an otherwise enlightened intellect. At present, this is only theory. It is an assumption that the mind is a unit; it is another assumption that if a unit, one part can not be affected without the whole participating. It may be true, and it may not. As yet, this theory has not taken so tangible and positive a shape as to permit the courts to take cognizance of it as an element upon which they are to act in protecting society, personal rights, and in the punishment of crime.

Lord Brougham's opinion, though of great weight, does not establish the fact of the unity of the mind, and the consequences claimed to depend upon such unity.

Chief-Justice Gibson charged the jury as follows, in a leading Pennsylvania case: that of

MOSLER *v.* THE COMMONWEALTH, 4 Barr. 266.

"A man may be mad on all subjects; and then, though he may have glimmerings of reason, he is not a responsible agent. This is general insanity; but if it be not so great in its extent or degree as to blind him to the nature and consequences of his moral duty, it is no defense to an accusation of crime. It must be so great as entirely to destroy his perception of right and wrong; and it is not until that perception is thus destroyed, that he ceases to be responsible. It must amount to delusion or hallucination, controlling his will, and making the commission of the act, in his apprehension, a duty of overruling necessity. The most apt illustration of the latter is the perverted sense of re-

ligious obligation, which has caused men sometimes to sacrifice their wives and children.

Partial insanity is confined to a particular subject, the man being sane on every other. In that species of madness, it is plain that he is a responsible agent, if he were not instigated by his madness to perpetrate the act. He continues to be a legitimate subject of punishment, although he may have been laboring under a moral obliquity of perception, as much so as if he were merely laboring under an obliquity of vision. A man whose mind squints, unless impelled to crime by this very mental obliquity, is as much amenable to punishment as one whose eye squints. On this point there has been a mistake, as melancholy as it is popular. It has been announced by learned doctors, that if a man has the least taint of insanity entering into his mental structure, it discharges him of all responsibility to the laws.

To this monstrous error may be traced, both the fecundity of homicides which has dishonoured this country, and the immunity that has attended them. The law is, that whether the insanity be general or partial, the degree of it must be so great as to have controlled the will of its subject, and to have taken from him the freedom of moral action.

But there is a moral or homicidal insanity, consisting of an irresistible inclination to kill, or to commit some particular offense. There may be an unseen ligament pressing on the mind, drawing it to consequences which it sees, but can not avoid, and placing it under a coercion, which, while its results are clearly perceived, is incapable of resistance. The doctrine which acknowledges this mania is dangerous in its relation, and can be recognized only in the clearest cases. It ought to be shown to have been habitual, or at least to have evinced itself in more than a single instance. It is seldom directed against a particular individual; but that it may be so is proved by the young woman who was deluded by an irresistible impulse to destroy her child, though aware of the heinous nature of the act. The frequency of this constitutional malady is fortunately small, and it is better to confine it within the

strictest limits. If juries were to allow it as a general motive, operating in cases of this character, its recognition would destroy social order as well as personal safety. To establish it as a justification in any particular case, it is necessary either to show, by clear proofs, its extemporaneous existence, of an habitual tendency, developed in previous cases, becoming in itself a second nature. Now, what is the evidence of mental insanity in this particular case?

1.—The prisoner's counsel rely on his behaviour, appearance, and exclamations at the time of the act, or immediately after it. According to one witness, his conduct was that of reckless determination, evincing an unsound mind. 'I do it,' he repeated three times, it is said, like a raving maniac. But you must recollect that, to commit murder, a man must be wound up to a high pitch of excitement. None but a butcher, by trade, could go about it with circumspection and coolness. The emotion shown by the prisoner was not extraordinary. He seemed to know the consequences of his act,—was under no delusion,—and was self-possessed enough to find a reason for the act, that reason being her alleged ill-treatment.

2.—It is urged that the want of motive is evidence of insanity. If a motive were to be necessarily proved by the Commonwealth, it is shown in this case by the prisoner's own declaration; but a motive need not always be shown,—it may be secret; and to hold every one mad whose acts can not be accounted for on the ordinary principles of cause and effect, would give a general license. The law itself implies malice where the homicide is accompanied with such circumstances as are the ordinary symptoms of a wicked, depraved and malignant spirit,—a heart regardless of social duty, and deliberately bent on mischief.

3.—But it is said there is intrinsic evidence of insanity from the nature of the act. To the eye of reason, every murderer may seem a madman; but in the eye of the law he is still responsible.

4.—His trip to Pittsburgh and voyage to Germany, it is contended, have not been accounted for, except that he expected to

get property in the latter, but did not; and there is an equal obscurity about the motive of his setting fire to his wife's property,—her barn, I think it was; but these things do not show an insanity connected with his crime. The only circumstance which seems to point to a foregone conclusion, is the repeated visions he had after he started for Pittsburgh, of his wife and her grand-daughter, whose throat he also attempted to cut, standing at the foot of his bed. This foreboding may tend to show a morbidness of mind in reference to this particular subject; but it is for you to say,—keeping in mind the fact, that, to constitute a sufficient defense on this ground, there must be an entire destruction of freedom of the will, blinding the prisoner to the nature and consequences of his moral duty,—whether these circumstances raise a reasonable doubt of the prisoner's responsibility."

Thus the law is laid down by the courts of New York and Pennsylvania, and they are followed perhaps by all the other States. The rule is general, and from the nature of the subject must necessarily be so. No arbitrary rule more definite than this would be at all practicable. And even such as it is, as explained and understood by the courts, it can not be applied strictly. What is said about "right and wrong," does not mean that a knowledge or admission barely, that the act was a bad or unlawful one, will warrant conviction in every case,—the whole character of the act must be rationally comprehended, or the party is not amenable to law.

The able editors of the Americal Journal of Insanity, who are always clear and correct in what they say upon the subject of insanity, make the following sensible suggestions: "The sanity or insanity of one, whose case is under legal investigation, is his responsibility or his irresponsibility,—rather his punishability or non-punishability,—his capacity or his incapacity. The medical man does not form an opinion in such cases, apart from these considerations; and he could not if he would. They are foremost with him in all cases presented;—are primary and inseparable from other considerations, and enter into all his plans of treatment.

Insanity, in a purely medical sense, is a *hypothetical* form of bodily disease. To the term are referred only those cases in which mental derangement exists, and in which no organic basis or other proximate cause can be determined. Thus, softening of the brain, sun-stroke, fracture of the skull, fevers, and alcoholic and other poisoning, are not insanity, though more or less connected with derangement of mind. How can it for a moment be thought that this classification has any thing to do with the question of responsibility in any case. A practical acquaintance with the phenomena of mental disorder, and the hearing of facts in the medical history of a case, can only be brought to bear directly upon the prime question of responsibility. Insanity, in any case, is irresponsibility, or incapacity, in such a case. And yet we are asked to define insanity before the courts! We may be thought hypercritical in attaching so much importance to the theory and classification of insanity, but we remember for whom these papers have been written. The mass of medical practitioners can have but little practical experience of mental disease, and will be greatly influenced by these theoretical divisions. It is not certain that the medical witnesses, in the Huntington case, would have made their unfortunate error in diagnosis, but for the admission by authorities of a 'moral insanity,' which they could not apprehend in the sense given it by experts in insanity. Although we are convinced that this theory would not have warped the estimate of this, or perhaps any case of questioned insanity, by their distinguished friend, who is its chief advocate in this country."[1]

In determining the responsibility of a person, it is necessary to determine what extent of deviation from the standard of a well-balanced mind there may be, before the responsibility of the party is lost. Each person, too, must be judged by his former self, rather than by the mental character of another, as he may have eccentricities peculiar to himself.

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[1] Journal of Insanity for April, 1859.

CHAPTER XXIX.

MORAL INSANITY.

We have had occasion already to allude to that specious and dangerous form of insanity, or sentimentality, known and dignified by the name of "moral insanity." The importance given to it by two of the first physicians in the country, and the use made of it by one of the ablest criminal lawyers in New York, in the celebrated Huntington case, render it a phase of the great subject of insanity worthy of attention and discussion.

The history of the Huntington case is full of interest, whether we consider the immense amount of money involved, the character of the defendant, the ability of the prosecution, or the singular, bold, and magnificent defense.

Huntington had lived a most reckless life in New York. Always ready for a venture, no matter what it was;—laying out cemeteries in the vicinities of large towns and cities,—getting charters from State legislatures and establishing banks,—setting up a great laundry upon the Isthmus for the purpose of doing up the washing of all who passed over that thoroughfare,—and finally establishing himself in Wall Street as a banker or broker, doing business with the sharpest financiers in the world, to the amount of *several millions* of dollars, upon *forged paper*. When at the hight of these magnificent operations, living in the most costly and extravagant style,—having the fastest horses, the finest furnished houses, etc., he is arraigned for the crime of forgery. The proof is overwhelming, and the amount incredible, and the defense is "moral insanity." "Two physicians of the first rank in their profession learn the history of the prisoner from his relations

and counsel, examine him briefly, and under unfavorable circumstances, two or three times while in prison, listen to the evidence at the trial, and afterward testify to his insanity."

Never before had moral insanity assumed a character so bold and dangerous. Never was a man defended with greater ability.

We consider it proper, therefore, to devote some attention to the subject.

The leading advocates of the theory of moral insanity in this country, are Dr. Ray,—who may be properly regarded as its champion,—Prof. Gilman, of New York, and Dr. Coventry, of Utica, New York. These distinguished writers urge moral insanity as an excuse or defense for crime; and they call upon the courts to suspend "the perpetration upon the scaffold of most cruel murder," charging that its practice presents a "long catalogue of judicial murders."[1] This stern and serious charge against the judiciary, coming as it does from so high a quarter, merits, and requires candid consideration. Moral insanity is a state of mind, as described by its advocates, where there is *no illusion*, nor affection of the intellect, unless it may arise from an inscrutable disease of the brain, but in which there is simply a perversion of the moral sentiment; the individual laboring under an impulso to perform certain extravagant and outrageous acts, injurious to himself and others,—such impulse being irresistible, so that he is to be held as being no more responsible for his acts or conduct than an ordinary lunatic, or infant.

Prichard's definition is: "A disorder of the moral affections and propensities, without any symptoms of illusion or error, impressed on the understanding." Again, it is defined by its advocates as "A perversion of the natural feelings, affections, inclinations, temper, habits, moral dispositions, or impulses, without any illusion or hallucination, the intellectual faculties being more or less weakened or impaired."

The application of principles like these to criminal jurispru-

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[1] Dr. Gilman.

dence, seems impracticable and unsafe, while the present standard of psychological science is so low.

The Divine law alone takes cognizance of motives; human law is limited to acts, and to motives only, as developed by acts. With the refined theories of ethics, human law does not, and can not contend. It endeavors to arrive at the intent of the actor by the act, and its attendant circumstances, the result therefore may not be certain, for the agencies involved are fallible. The Divine Judge is not limited to an overt act in determining the intent,—the purpose, the motive, the hidden thought, being at once seen by the Omniscient eye. His judgments alone are without possibility of error.

The law has its subtelties, but none so indefinite and shadowy as that involved in "moral insanity." If this theory is to be followed in this department of Criminal law, the courts launch at once upon an unexplored and unknown sea, without chart or magnet.

The American Journal of Insanity,—a journal that has, from the beginning, steadily and ably borne up against the powerful attempts that have been made to incorporate this new rule of criminal responsibility into our jurisprudence, says: "Moral insanity, as commonly understood and defined, does not fall within the precedents of the Common law, and is not provided for by statute, unless it be under the general term, 'insanity.' It may be as palpable to the eye of Omniscience, and possibly, to the scrutiny of an expert, (*expers expertissimus*, he must be,) as many forms of physical disease; but to legal tribunals it is shadowy and intangible;—its very name of 'moral insanity' seems to deprive it of legal recognition as a disease within the compass of exact definition and discrimination; and it is even doubtful whether it be a *disease;* and, therefore, if tolerated as a plea of irresponsibility, it would, like charity, cover a *multitude* of sins. Almost any man may satisfy his mind, if not his conscience,—a sane man, perhaps, the most readily,—that he has been surprised into a crime by some strange and irresistible impulse, some demoniacal instigation, some fatal propensity, or

some unaccountable phrensy, that he could not master for its suddenness and its force. Such casualties may be, and doubtless are; but God only can judge of them. Human laws can not: their nicest refinements are too gross for such subtilties. Beside, much of moral insanity, in the popular understanding of the term, is the want of discipline, and of habitual self-control;—nature uneducated and unchecked is, or very soon becomes the spirit of Cain,—a propensity to something wrong,—to theft, to perjury, to homicide, to forgery. If such impulses, instigations, propensities or phrensies are permitted to shield offense against punishment, St. Giles' and the Five Points might surfeit the Criminal courts with pleas of that character, the result, not of *disease*, but of *habit* not absolutely uncontrollable,—of such defective discipline, and of such voluntary indulgence in vicious courses as have deadened the moral sense, and confounded the appreciation, without obliterating the knowledge of right and wrong, much less the power of choosing between then."[1]

The same high authority upon matters of insanity says: "The exercise of any discretion in criminal cases, for the tempering of justice to society, with mercy to the accused, is legally confided to the executive authority, and not to the tribunals; subject to the practical qualification, that juries sometime leave no room for the exercise of any discretion but their own, by finding a verdict that absolves the accused. A humane jury will, in cases appealing to their sympathy, and showing, what in France are called 'extenuating circumstances,' seize upon the most trifling evidence of insanity to justify a verdict in consonance with their sense of humanity, rather than with the rigidness of the law. Juries are usually above law, when law itself is not flexible enough to conform to the dictates of a reasonable sympathy, and then it is, their *legal* conscience surrenders to the dictates of their *moral* conscience, confident that the common suffrages of the humane will applaud their decision."

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[1] The American Journal of Insanity, Vol. 12, p. 339.

Sir Benjamin Brodie, the distinguished philosopher and surgeon, says: "The law makes a reasonable allowance of time for the subsiding of passion suddenly provoked, but we are not therefore, to presume that the same allowance is to be made for those in whom a propensity to set fire to their neighbor's house, or commit murder, is continued for months, or weeks, or even for hours. Is it true that such persons are really so regardless of the ill consequences which may arise, so incapable of the fear of punishment, and so absolutely without the power of self-restraint, as they have been sometimes represented to be? If not, there is an end of their want of responsibility. Take the case of a gouty patient. Under the influence of his disease, every impression made on his nervous system is attended with uneasy sensations. If such a person has exerted himself to acquire the habit of self-control, the evil ends with himself, but otherwise he is fractious and peevish; flies into a passion without any adequate cause, with those around him, and uses harsh words which the occasion does not justify, conduct of which he can offer to himself no explanation except that he can not help it, and for which, if he is a right-minded man, he is afterward sorry. If he were to yield to the impulse of his temper so far as to inflict on another a severe bodily injury, ought it to be admitted as an excuse, that Dr. Garrod had examined his blood and found in it too large a proportion of lithic acid? Yet when the boy, Oxford, yielded to what was probably a less violent impulse, which caused him to endeavor to take away the life of the Queen, the jury acquitted him, on the ground of his being the subject of 'moral insanity.' It seems to me that juries have not unfrequently been misled by the refinements of medical witnesses, who, having adopted the theory of purely moral insanity, have applied that term to cases to which the term insanity ought not to be applied at all. It is true, that difference in the character of individuals may frequently be traced to a difference in their organization, and to different conditions as to bodily health; and that, therefore, one person has more, and another less difficulty in controlling his temper

and regulating his conduct. But we have all our duties to perform, and one of the most important of these is, that we should strive against whatever evil tendency there may be in us arising out of our physical condition. Even if we admit, (which I do not admit in reality,) that the impulse which led Oxford to the commission of his crime was at the time irresistible, still the question remains, whether, when the notion of it first haunted him, he might not have kept it under his control, and thus prevented him from passing into that state of mind which was beyond his control afterward. If I am rightly informed, Oxford was himself of this opinion; as he said, when another attempt was made to take away the life of the Queen, 'that if he himself had been hanged this would not have happened.' We have been told of a very eminent person, who had acquired the habit of touching every post that he met with in his walks, so at last it seemed to be a part of his nature to do so; and that if he found that he had inadvertently passed by a post without touching it, he would actually retrace his steps for the purpose. I knew a gentleman who was accustomed to mutter certain words to himself, (and they were always the same words,) even in the midst of company. He died at the age of ninety, and I believe that he muttered these words for fifty or sixty years. These were foolish habits; but they might have been mischievous. To correct them at last would have been a very arduous undertaking. But might not this have been easily done at the beginning? and if so,—if instead of touching posts, or muttering unmeaning words, these individuals had been addicted to stealing or stabbing,—ought they to have been absolved from all responsibility? It has been observed by a physician, who has had large opportunities of experience in those matters, that 'a man may allow his imagination to dwell on an idea until it acquires an unhealthy ascendency over his intellect.'[1] And surely, if under such circumstances, he were to commit a murder, he ought to be held a

[1] Forbs Winslow.

murderer, and would have no more claim to be excused than a man who voluntarily associated himself with thieves and murderers until he has lost all sense of right and wrong; and much less than one who has had the misfortune of being born and bred among such malefactors. * * * * It certainly seems to me to be not less absurd in itself than it is dangerous to society at large, to hold that any one, whom the dread of being punished might deter from the commission of crime, is not a fit subject of punishment. At the same time, I fully admit that a more or less unsoundness of mind may afford a sufficient reason for commuting, or modifying the nature of the penalty. Allow me to add, that it is a very great mistake to suppose that this is a question which can be determined only by medical practitioners. Any one of plain, common sense, and having a fair knowledge of human nature, who will give it due consideration, is competent to form an opinion on it, and it belongs fully as much to those whose office it is to administer the law, as it does to the medical profession."[1]

Dr. D. M. Reese, who has discussed this question in an able report to the American Medical Association, upon the subject, says: "But we now proceed to inquire 'wherein does such moral *insanity* differ from moral *depravity*,' as defined by our standards? 'I find a law in my members, warring against the law in my mind.' 'When I would do good, evil is present with me.' 'He that knoweth to do good, and doeth it not, to him it is sin.' 'He that knoweth his Master's will, and doeth it not, he shall be beaten with many stripes.' 'As a man thinketh, so is he.' '*Video meliora proboque, deteriora sequor.*' 'I see the good, and yet the ill pursue.' Here we see by Christian and heathen authorities, that such 'moral insanity' is a synonym of 'moral depravity,' and that responsibility and 'punishability' are not to be shunned or evaded by this plea. Intellectual insanity, resulting from

[1] Mind and Matter; or, Physiological Inquiries, etc., by Sir Benjamin Brodie, Bart., D. C. L.; Vice-president of the Royal Society, 99—104.

physical disease in the brain, either functional or organic, and to an extent which incapacitates from reasoning correctly, by reason of illusion, delusion, delirium, or hallucination, can alone release from the obligation of morals and law, in the judgment of sound judicial authorities.

The writers who have successively urged this plea of 'moral insanity,' in behalf of criminals of every grade, maintain the doctrine that the instances of moral depravity, and especially the examples of the most hideous crimes, all are so many evidences that 'moral insanity' exists, and that the parties are thus depraved, because of this malady. The greater the criminal, say they, the more reason exists for interposing this plea, for no man in his senses would or could perpetrate such 'deeds of blood, as make the cheek of darkness pale.' Hence, the practical effects of their creed are avowed to be sought in the abolition of the gallows, and the conversion of our prisons and penitentiaries into hospitals, where the perpetrators of capital crimes should be treated as patients, and not as criminals. Such men, they argue, are only the victims of a 'faulty organization,' their 'moral organs' being too active, by reason of morbific causes, which impel them to their guilty career, with an 'irresistibility,' of which they are the hapless victims.

They differ with the great German expert, Heinroth, who stoutly maintained that *all insanity* originates in *vice*, for they assume the opposite doctrine, that all vice has its origin in insanity. Hence, they avow the opinion that the commission of crime is *prima facie* evidence of 'moral insanity.' Irresponsibility is therefore claimed for all law-breakers, and the more desperate the criminal, the stronger is the evidence that he is morally insane.

There is a specific sense in which all the guilty and depraved may be said to be morally insane, as is distinctly taught in the Scriptures, and insisted on by a large class of theologians. The mooted questions of natural ability, and moral inability, co-existing in the same mind, are urged as exhibiting a clear, intellectual

perception of the path of duty, in those who are so imbecile in their will that their corrupt passions, strengthened by evil habits and vicious associations, overrule their intellect, and precipitate them into vice and crime. Such depravity may become irresistible, and yet irresponsibility can not be predicated in such cases; but the contrary, since their moral inability is self-originated. Insanity may be, in a multitude of cases, the result of such depravity, by the vicious indulgence, when often repeated and long continued, involving the structure of the brain in serious or hopeless physical disease.

That distinguished philosopher and philanthropist, Dr. Benjamin Rush, before the commencement of the present century, seems to have been the first to recognize that form of insanity, since called *dipsomania*, and, indeed, he preceded Pinel himself, in pleading for habitual drunkards, by ascribing their follies and crimes to *moral insanity*, which he defined 'derangement of the moral faculty, or morbid operations of the will.' Hence, to rescue such from the penalties of Criminal law, he urged the opening of hospitals, or sober houses, for their physical restraint and moral treatment, alleging that they were as fit subjects for such sympathy, as other mad people. He declared all such to be monomaniacs, the victims of physical disease, which he, with philosophical accuracy, located in the brain. He taught that, although their drinking habits were the fruit of moral depravity at first, yet, after the brain itself had become diseased by this vice of indulgence, their continued drinking was the result of insanity.

The professions of both medicine and law have conceded the justice of his views, and hence a wise distinction has been made in the statutes between the delirium of recent intoxication, which is regarded by the courts as no excuse but rather an aggravation of crime, and the insanity which accompanies a paroxysm of delirium tremens, which is held to be a legitimate defense against the penalties of the law. This may be called a moral insanity, but it is primarily a physical, and secondarily, an intel-

lectual insanity, and is included in our proposed definition, by the presence of disease in the brain, and the unconsciousness of the change which has occurred in the mental functions, even while they are terrific and appalling to every beholder. Our profession are at no loss in identifying this form of *mania-à-potu*, nor are the courts and juries embarrassed by any conflicting decisions or precedents."

The question too, whether the punishment of those whose minds are partially under a cloud, or who have less control over their actions, resulting from their own fault, or of original or accidental organization, can be graduated according to the circumstances of the particular case, is well worthy of close and careful consideration.

This view of the difficult subject has already attracted the attention of able writers. Dr. John Charles Bucknill, of England, Mr. Wharton, the author of the "American Criminal Law," and the American Journal of Insanity, all unite in recommending the establishment of a separate institution for the confinement and special use of that class of alleged lunatics guilty of crimes, who may actually labor under some ameliorating circumstance, where proper punishment may be administered, and the necessary help afforded to restore the person to a healthy control of his actions.

There are, doubtless, many cases of alleged unsoundness of mind, perhaps real, which the courts can not recognize, that demand, nevertheless, milder and different treatment from that measured out to ordinary criminals, and if such cases can be distinguished, and the criminal propensities corrected, and virtuous tendencies invigorated by the necessary restraint and proper punishment, it should be done. The effort, at least, is worthy of a patient trial. In almost every lunatic asylum may be found those who have come to regard themselves highly favored and privileged above most men on this account, that they have committed and still may commit crime with impunity, where ordinary mortals, even children, would be held to answer to the law; and the

idea will spread like an epidemic among this class; they bear themselves as a privileged class, or like potentates. It is possible and probable that a little wholesome punishment, well regulated, when they commit crime, would, in nine cases out of ten, prevent a repetition of it, by reminding them that they still belong to the human race, and that they can and must suffer for the violation of the rights of others.

There may be illusion, delusion, or a morbid habit of thought, without real madness. If the illusion of sense is conjoined with the loss or a defect of the comparing power,—of reasoning upon his delusion, he should not be held responsible. But if there is only a want of resolution,—an inertia of thought, from which cause comparison and consideration are not exercised, and the illusion thrown off, then the individual is himself to blame, and should be held to answer for what has resulted from his own want of resolution. If the power to reason by a special effort, on the part of the individual is destroyed, he will be no longer responsible for his acts.

There being but very few well-balanced minds, it would be a dangerous practice to hold, that because a man labored under some degree of mental delusion or error in his judgment in regard to his transactions or ideas, he is not a responsible agent. Both sanity and insanity may, in many cases, depend upon the amount of resolution exerted by the individual in reasoning upon the subject. If his intellectual machinery is quickened by disease, or from any other cause, it may still be under the control of the will or judgment, though requiring a greater effort than when in a well-balanced and healthy condition.

Fear, is one of the lowest, if not the very lowest motive that can influence the conduct of men. Still it is brought to bear upon the human mind for the highest purposes, and doubtless with advantage, for after a man is arrested in a vicious course of conduct by fear, and brought to stop and think, he may, and in most cases does, take higher grounds. First, he avoids the wrong because of the punishment, then he does right because he

sees it is beneficial to him and others, and finally, he is led to follow a virtuous course of life for the sake of virtue itself, and from a sense that it is well pleasing to God.

This motive of fear must be a powerful balance wheel in the mental apparatus of the insane, especially those who are capable of arousing themselves to a correct train of thought and reasoning, but from habit or indolence, are unwilling so to do. When all power of reasoning from cause to effect is destroyed, then, of course, the motive of fear can not be brought to bear; but when it will influence conduct and prevent crime, then it should be inflicted upon those of insane or unbalanced mind, as well as upon the sane.

A man may be insane from passion. A false report may incense him to a degree of fury; he, however, believes it to be true, and he seeks his supposed enemy and inflicts upon him severe punishment;—he does not take his life, because he fears punishment. No love for order or law restrains him, for he transgresses law by thus revenging himself. But he may stop short of assassination, because of fear of punishment. The madman does the same thing,—his own senses suggest to him what the former received from a second person; wherein do they differ? If either had taken the proper measures within his reach to ascertain truth, then the result might have been avoided. Both knew that such summary vengeance is forbidden by law. The former is subjected to the degree of punishment his crime deserves, why should not the latter be?

There is no doubt that the high intellectual powers of man may be let down and prostituted by habit, by giving way to passion, instead of being properly restrained,—by *permitting* the mind to dwell upon improper subjects, or take what he well knows to be a wrong view of things, from a controllable indisposition to make the necessary effort, until a morbid state is superinduced. The stimulus of passion, or a steady fixedness of thought in a particular channel, causes an increased flow of blood to the brain; it hightens and intensifies the functions of mind, and this may

be continued until there is actual change of structure, adapted to, and brought about by this passion or habit of thought upon an improper subject, just as the sexual appetite may be intensified by habit of life and thought until it is beyond control, and the victim sinks to a premature grave. Had the passion been properly restrained, which was at one time possible, then it would have been a blessing, and completely under control through life. The attributes of man, mental and physical, are to be used with *judgment*,—if he neglects to use them enough, they perish, and atrophy of mind or body is the result; if he overtasks them, then the vital forces are too strong for the machinery, and plethory, apoplexy, hypertrophy, or even insanity may supervene. But with the judicious guidance of that reason and judgment that make man a moral and responsible agent, he sails securely past these dangerous reefs and whirlpools, enjoying a happy, thrilling, beautiful life.

The alternative is most generally with the individual himself, whether a strong *desire* or *tendency* to do a particular act, shall be controlled and kept under, until it disappears or subsides altogether; or whether it shall be indulged in until its influence has increased and become irresistible. "Inefficiency of intellectual force" is a convenient plea for the gratification of proscribed and dangerous indulgences or passionate revenges, but it would be both puerile and dangerous to admit it in courts of justice.

That man who has attained mature life, without having ever put the brakes upon his passions, will find it no light work to check them then. Every year it requires more resolution to summon the necessary force, until that which at first had been easy, becomes almost an impossibility, and the moral, intelligent youth grows into a passionate animal, driven by the whirlwind of his instincts, his appetites and passions unbridled and intensified. Without *disease* of brain, except what he has himself produced by criminal neglect of the proper use of reason, he is the slave of self indulgence and cherished sins.

The child permitted to run wild, and have the full gratification

of his wishes for a few years, when finally checked up, rebels against it, and will not be restrained except by a superior force or fear; so it is with the brain or mind unaccustomed to the steady restraint of a tender, healthy conscience and enlightened intellectual force; when the latter attempts to assert its sway, it is in a measure powerless.

Many insane criminals are educated and formed, by their own negligence, in this way. Should they not be held to a strict accountability? To say such a one is insane, and therefore not subject to punishment, is to utter a dangerous folly, and to encourage unchecked passion and fatalism.

Pinel gives the following case: "An only son, educated by a silly and indulgent mother, was accustomed to give way to all his passions without restraint. As he grew up, the violence of his temper became quite uncontrollable, and he was constantly involved in quarrels and lawsuits. If an animal offended him, he instantly killed it; yet when calm he was quite reasonable, managed his large estate with propriety, and was even known to be beneficent to the poor; but one day, provoked to rage by a woman, who abused him, he threw her into a well. On the trial so many witnesses deposed to the violence of his actions, that he was condemned to imprisonment in a mad-house."

This is the history of very many passionate men, who are counted among the sane until they commit some great crime, then their irregularities are at once counted up and pronounced evidence of insanity. For the time being the person may be in a state of mania, or in a condition bordering thereon, but he is not the less responsible, for he has wrongfully permitted himself to become so. If he becomes thus insane, permanently or continually,—not momentarily,—even though he has brought it on himself wrongfully, he is not considered in law responsible. Thus insanity produced immediately by drunkenness does not shield the criminal, because he voluntarily made himself so; while insanity produced immediately by *delirium tremens*, affects and relieves the responsibility, because *delirium tremens* is not the

intended result of drink, in the same way that drunkenness is, there being no possibility that *delirium tremens* will be voluntarily generated in order to afford a cloak for a particular crime.[1]

Most cases of insanity are undoubtedly induced by some fault of the person himself,—some infraction of the laws of his being, which he need not have violated, yet being so remote the law does not regard it.

"A man unaccustomed to self-control becomes occupied with one thought; his ambition has been disappointed perhaps, or a lawsuit has perplexed him, or he has been much employed in some engrossing pursuit, until, unable to regulate his thoughts at will, he finds the one which circumstances have made habitual, recur uncalled for. An effort would probably dismiss it, for every one who has studied much, knows that he has had to dismiss many an intruding thought, and with some effort too, if he wished to make progress in what he has undertaken; but this individual has never been accustomed to make any such effort, and he knows not how to free himself from the subject which thus haunts him. If it is an unpleasant one he is wearied and worn by it; but every day that it is not driven off, it assumes a greater power, for the part of the brain thus brought into action is now by habit rendered more unfit for use than any other; he has not resolution enough to free himself from his tormentor by a determined application to something else which would require all his attention; he sits brooding over it, and when life has thus become irksome, he strives to terminate his discomfort by suicide; yet here is no structural disease, and if the man could be persuaded to exert himself, he might be sane. I will give an instance: The master of a parish work-house, about thirty years of age, was subjected frequently to groundless suspicions of peculations. Being naturally a taciturn, low-spirited man, these

[1] Wharton's Crim. Law, 135; U. S. *v.* Drew, 5 Mason U. S. Rep. 28; U. S. *v.* Forbes, Crabbe's Rep. 558; Bennet *v.* State, Mart. & Yerg. 133; U. S. *v.* Clark, 2 Cranch, C. C. Rep. 158; R. *v.* Thomas, 8 C. & P. 820; 1 Rus. on Cr. 7; 4 Black. Com. 26.

false accusations which involved his character, and consequently the maintenance of his family, preyed upon his mind, and a profound melancholy was the result, attended by the usual symptomatic derangement of the digestive functions, and a constant apprehension that he had done something wrong, he did not know what. No assurance on the part of those who knew and esteemed him had any effect, and finally, after some months of melancholy, he attempted to destroy himself. He was then removed to St. Luke's hospital, whence, after a year had elapsed, he was discharged incurable. He was now placed in a private receptacle of the insane, and here suffered all the misery which at that time pauper lunatics were subject to. He was visited at this place by a benevolent man, who seeing his state, immediately ordered him to be removed into the gentleman's apartments, and paid for his maintenance there. In a few months afterward he was visited by the clergyman of his parish, who on conversing with him, considered him sane. The man begged to be allowed to rejoin his wife and family, and the rector, after many difficulties and some threats to the parish authorities, succeeded in setting him free. The man from that time was able to maintain his family by his trade of shoemaking, for if ever a fit of melancholy came over him his wife would threaten that he should go back to the mad-house, which was sufficient to engage him to make an effort to resume his cheerfulness; and he remained to old age a sane man. Here the insanity had been mere inefficiency of the intellectual force. Placed in a place of comparative ease his mind had become calm; the wish to return to his wife and family, and the hope of it, kept up by the visits of benevolent friends, did the rest; for, be it observed, during the whole time he never felt himself abandoned. The poor and the uneducated are the classes which most usually suffer from the inefficiency of the intellectual force; it is among the higher ranks usually that its misdirection is a source of insanity."[1]

[1] Barlow on Man's Power over himself to prevent or control Insanity. London, 1843.

The same author says that Henri of Bourbon, son of the great Condé, at times imagined himself transformed into a dog, and would then bark violently. Once this notion seized him while in the king's presence; he then felt it needful for him to control himself, and he did so; for though he turned to the window and made grimaces as if barking, he made no noise. Had the king's eye been on him, it is probable that he would have avoided the grimaces also.

If these general views are correct, then it behooves society for its protection, and the courts representing society, to constantly keep the preventive influence of just and well-regulated punishment before all who may be unwilling to restrain an evil tendency to commit crime, or to do that which inevitably leads to it, until they themselves believe they have a right to do so, because they are told, they are not able to withstand the temptation. "They can not hang him," said the inmates of York lunatic asylum, when a supposed lunatic like themselves, Martin, who burnt York Minster, was being tried, "he is one of ourselves!"

The celebrated Sickles case illustrates the tendency to drift from the old moorings, that now exists on this subject.

The distinguished counsel who conducted the defense in the Huntington case, defended Sickles when arraigned for killing Key, where he also interposed the defense of insanity; not calling it, however, moral insanity, but "jealousy." He uses the term: "Jealousy is the rage of a man," repeatedly, and says, "it converts him into a phrensy, in which he is wholly irresponsible for what he may do."

Mr. Brady claimed that the immediate circumstance attending the seduction of Mr. Sickles' wife, and the death of Key, were of so atrocious a nature as to overwhelm the mind of Sickles instantaneously, and thus render him irresponsible for the crime of murder. He therefore drew up the following propositions, and requested the court to embody them in its charge to the jury:

"1.—If, from the whole evidence, the jury believe that Mr. Sickles committed the act, but at the time of doing so was under

the influence of a diseased mind, and was really unconscious that he was committing a crime, he is not in law guilty of murder.

2.—If the jury believe that from any predisposing cause the prisoner's mind was impaired, and at the time of killing Mr. Key he became, or was mentally incapable of governing himself in reference to Mr. Key, as the debaucher of his wife, and at the time of committing said act, was, by reason of such cause, unconscious that he was committing a crime as to said Mr. Key, he is not guilty of any offense whatever.

3.—It is for the jury to say what was the state of the prisoner's mind as to the capacity to decide upon the criminality of the particular act in question,—the homicide,—at the moment it occurred, and what was the condition of the parties respectively as to being armed or not at the same moment.

These are open questions for the jury, as are any other questions which may arise upon the consideration of the evidence, the whole of which is to be taken into view by the jury.

4.—The law does not require that the insanity, which absolves from crime, should exist for any definite period, but only that it exists at the moment when the act occurred with which the accused stands charged.

5.—If the jury have any doubt as to the case, either in reference to the homicide or the question of sanity, Mr. Sickles should be acquitted."

These propositions were argued at great length by counsel, especially by Mr. Brady, who contended that the great sorrow that had fallen upon Mr. Sickles, had, in fact, dethroned his intellect, and for the moment he was not accountable for what he did. CRAWFORD, J., charged as follows on these propositions:

"Gentlemen of the Jury: The court is asked to give to the jury certain instructions, whether on the part of the United States or on the defense. The first instruction asked for by the United States, embodies the law of this case on the particular branch of it to which it relates, and is granted with some explanatory remarks as to insanity, with a reference to which the prayer

closes. A great English judge has said, on the trial of Oxford, who shot at the Queen of England: 'That if the prisoner was laboring under some controlling disease which was, in truth, the acting power within him which he could not resist, then he will not be responsible.' And again: 'The question is, whether he was laboring under that species of insanity which satisfies you that he was quite unaware of the nature, character and consequences of the act he was committing, or in other words, whether he was under the influence of a diseased mind and was really unconscious at the time he was committing the act that that was a crime.' A man is not to be excused from responsibility if he has capacity and reason sufficient to enable him to distinguish between right and wrong as to the particular act he is doing; a knowledge and consciousness that the act he is doing is wrong and criminal and will subject him to punishment. In order to be responsible, he must have sufficient power of memory to recollect the relation in which he stands to others, and in which others stand to him; that the act he is doing is contrary to the plain dictates of justice and right, injurious to others, and a violation of the dictates of duty. On the contrary, although he may be laboring under a partial insanity, if he still understands the nature and character of his act and its consequences; if he has a knowledge that it is wrong and criminal, and a mental power sufficient to apply that knowledge to his own case, and to know that if he does the act, he will do wrong and receive punishment, such partial insanity is not sufficient to exempt him from responsibility for criminal acts.

Now we come to those asked on the part of the defense, the first of which is in these words:

In reply to the ninth instruction, the court responds thus: 'It is for the jury to say what was the state of Mr. Sickles' mind as to the capacity to decide upon the criminality of the homicide, receiving the law as given to them in relation to the degree of insanity, whether it will, or will not, excuse, they (the jury) find-

ing the fact of the existence or non-existence of such degree of insanity.'

The tenth prayer reads thus: 'The law does not require that the insanity, which absolves from crime, should exist for any definite period, but only that it exist at the moment when the act occurred, with which the accused stands charged.'

That instruction is granted. The time when the insanity is to operate is the moment when the crime charged upon the party was committed, if committed at all. The eleventh and last instruction asked reads this way:

'If the jury have any doubt as to the case, either in reference to the homicide or question of sanity, Mr. Sickles should be acquitted.'

This instruction, as I mentioned in referring to prayer four of the United States, will be answered in conjunction with it.

It does not appear to be questioned that if a doubt is entertained by the jury the prisoner is to have the benefit of it. As to the sanity or insanity of the prisoner at the moment of committing the act charged, it is argued by the United States that every man being presumed to be sane, the presumption must be overcome by evidence satisfactory to the jury, that he was insane when the deed was done.

This is not the first time this inquiry has engaged my attention. The point was made and decided at the June Term, 1858, in case of the United States *v.* Devlins, when the court gave the following opinion, which I read from my notes of the trial: This prayer is based on the idea that the jury must be satisfied, beyond all reasonable doubt, of the insanity of the party for whom the defense is set up; precisely as the United States are bound to prove the guilt of a defendant to warrant a conviction. I am well aware, and it has appeared on this argument, that it has been held by a court of high rank and reputation, that there must be a preponderance of evidence in favor of the defense of insanity to overcome the presumption of law, that every killing is a murder; and that the same court has said that if there is an equili-

brium, including, I suppose, the presumption mentioned of evidence, the presumption of the defendant's innocence, makes the preponderance in his favor.

Whether a man is insane or not, is a matter of fact; what degree of insanity will relieve him from responsibility is a matter of law, the jury finding the fact of the degree too. Under the instruction of the court, murder can be committed only by a sane man. Everybody is presumed to be sane who is charged with a crime, but when evidence is adduced that a prisoner is insane, and conflicting testimony makes a question for the jury, they are to decide it like every other matter of fact, and if they should say or conclude that there is uncertainty, that they can not determine whether the defendant was or is not so insane as to protect him, how can they render a verdict that a sane man perpetrated the crime, and that no other can?

Nor is this plain view of the question unsupported by authority. In the case of the Queen *v.* Ley, in 1840, Lewins C. C., p. 239, on a preliminary trial to ascertain whether a defendant was sufficiently sane to go before a petit jury on an indictment, HULLOCK, B., said to the jury: 'If there be a doubt as to the prisoner's sanity, and the surgeon says it is doubtful, you can not say he is in a fit state to be put on trial.' This opinion was approved in the People *v.* Freemen, Vol. 4 Denio's Report, p. 9. This is a strong case, for the witness did not say the prisoner was insane, but only that it was doubtful whether it was so or not. The humane, and, I will add, just doctrine, that a reasonable doubt should avail a prisoner, belongs to a defense of insanity, as much, in my opinion, as to any other matter of fact. I believe, gentlemen, that that answers all the questions."

In the Huntington case, a wild, reckless and criminal spirit of speculation was urged as one form of insanity, and should be a defense and turn aside the edge of the law; while in the Sickles case, the same able lawyer labored with great skill to show that "jealousy is the rage of man," that "it converts him into a phrensy, in which he is wholly irresponsible for what he may do."

In the latter case it is to be remarked, and to the honor of the medical profession, that the defense received no assistance from distinguished medical men.

Medical witnesses should weigh well the effect of their evidence on the question of insanity when it is of a speculative character. They should remember that it may be, in the hands of able criminal lawyers, a powerful agency for shielding crime, through the intervention of a humane and kind-hearted jury.

If the defense in the cases of Huntington and Sickles had succeeded,—and we do not know how far this element in the defense of Sickles influenced the jury that acquitted him,—then would we have the propositions established, that a long course of vice and reckless speculation, based upon forgery, and that sudden violent passion, resulting in homicide, are each evidences of insanity, and a legitimate defense for the accused, thus overturning the very foundations of civil and religious society.

CHAPTER XXX.

OPINIONS OF LAYMEN, AS EVIDENCE UPON ALLEGED INSANITY.

An unsettled question of much importance, connected with the Medical Evidence of insanity, is whether or not the testimony of those who are not medical experts should be received in determining the mental character of the alleged insane party.

Able medical and legal authority is found on both sides of the question.

While it should not be denied that the learned and experienced, like Drs. Ray, Gilman, Coventry and Woodward, can determine close questions of mental aberration more correctly and certainly, than any other persons of less experience, yet there are but few such men, and if they were more numerous, there is no good reason why these questions should be submitted to them alone.

A medical man not connected with insane asylums, is in general but little, if any better qualified to give an opinion upon insanity than the intelligent unprofessional man. He may not be as well qualified to judge of the condition of the alleged insane person, as one who is acquainted with the previous history of the party, and who can compare his present condition with his previous acts and character. Hence the folly of shutting out all evidence but that of experts on the trial of these cases.

The distinguished American editor of the Cyclopedia of Practical Medicine, upon this point, says:

"In regard to the nature of the testimony relied upon in cases of insanity, and the mode of judging of the same, there is much room for animadversion. Too great weight appears to be given to medical testimony in such cases. It has always been the

expressed conviction of the writer, that medical men are no better judges of the existence of mental alienation, than well-informed and discriminating individuals not of the profession. The only advantage, at least, which they can be presumed to have, is from the constant habits of observation and discrimination, which the practical exercise of their profession requires. Yet, for no other reason than that they belong to the medical profession, inferior men, whose judgments on any other subject would be contemned, are often called upon to decide and establish the existence or non-existence of a mental condition which demands the most careful and rigid scrutiny."

An able writer in the British and Foreign Medical Review, thinks it "essential for justice to abolish medical testimony as it is at present given on trials for crime, when insanity is the plea; and that questions of this important nature should be referred to a board of twelve or more competent men. The state of mind of a person accused of crime, should not be left to be decided by those members of the profession whom the prisoner or his friends may select, for their known support of his case. As to the questions of his responsibility and punishment, these should be intrusted to the authorities of law. The whole subject is surrounded with difficulties, and hence much room is left for the ingenuity of counsel, to act upon a jury generally composed of men who are eminently unqualified for forming any correct judgment on the intricate subject submitted to their decision."

Dr. Meredith Reese adds the weight of his testimony to the above views. He says: "Many medical men announce their opinions as to the sanity or insanity of a defendant, as an oracle, and with a confidence proportionate to their ignorance. And when called upon by the ministers of the law for the grounds or reasons upon which their opinion is based, they are 'wiser than twenty men who can give a reason,' while they reply, 'no definition is possible, no test is reliable, but your right and wrong theory is arrant nonsense.' We doctors are the judges, and 'wisdom will die with us.' Verily, we assume that another Daniel has come

to judgment. That our brethren of the bench and bar should smile at our ludicrous assumption of infallibility, and that a common-sense jury should ignore such incoherent testimony, and even impute 'moral insanity' to such doctors, is not at all marvel ous."[1]

Sir Benjamin Brodie says: "Allow me to add, that it is a great mistake to suppose that this is a question which can be determined only by medical practitioners. Any one of plain, common sense, and having a fair knowledge of human nature, who will give it due consideration, is competent to form an opinion on it; and it belongs fully as much to those whose office it is to administer the law, as it does to the medical profession."[2]

How are most cases of insanity determined? We have seen there are no purely scientific or medical tests. There being, therefore, no scientific standard by which the act in controversy can be determined positively, a responsible or irresponsible one, the question must be determined by weighing well all the attending circumstances connected with the act,—the previous history of the individual,—his character and conduct in early life, and mature manhood,—the causes that may have incited him to the alleged insane act,—the manner of its execution,—the conduct before and after the act,—the eccentricities of character and conduct,—peculiar opinions,—in what respect the individual differs, not with all others, but with himself,—his former self,—whether the careful, prudent, and cautious man, suddenly becomes a careless, visionary speculator, squandering his property,—whether the fond and affectionate parent becomes tyrannical and morose without any known adequate cause,—whether a previous blameless life is suddenly changed into one of crime, apparently without any motive,—if he assigns a reason for his conduct, whether it is not wholly extravagant and insufficient;—these considerations and very many

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[1] Pamphlet Report on Moral Insanity, in its Relations to Medical Jurisprudence, 16.

[2] Mind and Matter; or, Physiological Inquiries, 105.

others, enter largely into the determination as to insanity or sanity; and who are better able to mark and weigh these elements, than those persons nearest and best acquainted with the alleged insane person,—having the best opportunity of knowing his history,—the changes in it, if any,—than his family, and those clear-headed business men with whom he has dealt, and who have observed him closely, perhaps for years. Yet these persons, who are of all others, often best qualified to decide these questions, are not competent witnesses on insanity; and its solution is handed over to a medical man, who perhaps, sees the party for the first time in court, or a half an hour in jail.

Haslam and Shelford remark, "that it has been questioned whether medical evidence to prove insanity, be not inferior to that of other people who may have had opportunities of observing the individuals, when the same opportunities have not been in the power of the practitioner."

This question has generally divided the bench, when it has been called to pass upon it. It was fully discussed and considered in the Supreme Court of New York in an important case,[1] and also in a late case in the Court of Appeals of the same State.[2] These are undoubtedly the leading cases upon this point in this country.

In the case of Culver *v.* Haslem, the majority of the court held, that any one intimately acquainted with the alleged insane person, though not a professional man, might express an opinion upon the question. The court says:

"Apart from the difficulty of restraining a witness from intermingling his opinions with his testimony, in questions of this kind, there are strong reasons why he should be permitted to do so, when he discloses the facts and circumstances within his knowledge, upon which they are founded. Human language is imperfect; and it is often impossible to describe, in an intelligible manner, the

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[1] Culver *v.* Haslem, 7 Barb. 314.

[2] Dewitt *v.* Barley & Schoonmaker, 5 Selden, 371.

operations of the mind of another. We learn its condition only by its manifestations, and these are indicated, not only by articulate words, but by signs, gestures, conduct, the expression of the countenance, and the whole action of the man. Nor is there any danger that a court and jury will be misled by such opinions when the reasons for them are disclosed. The force and value of opinions depend upon the general intelligence of the witness, the grounds on which he bases it, the opportunities he has had for accurate and full observation, and his entire freedom from bias or interest. I agree with Judge Cowen, in Norman *v.* Wells, that causes are, in general, better tried without them, and I concur with him, the Chancellor, Senator Verplanck and Judge Barculo, that mere opinions of an ordinary witness, unless supported by good reasons, and founded on facts, are entitled to no regard. The question under consideration, is not what weight should be given to such opinions, but whether they are *competent*. The learned judge correctly instructed the jury that they were entitled to but little *weight*. I think he was right also in holding them admissible, with the qualification under which they were received."

This decision of the Supreme Court of New York was reversed by the Court of Appeals, in the case of Dewitt *v.* Barley & Schoonmaker, when the whole question was again ably discussed by the counsel and court. The decision however of the court, is essentially shaken by the able dissenting opinion of a large minority, among whom is Mr. Justice Denio. He says:

"In a case of doubtful competency, witnesses will ordinarily be produced who knew the individual when in health, who have observed the changes which have since taken place, and have incidentally tested his memory and judgment in a great number and variety of instances in the relations of social and domestic life, the particulars of which have been forgotten, though the impression caused by them remains upon the mind of the witness. Such a witness, if possessed of discrimination and judgment, will usually have formed an opinion of considerable value

as to the capacity of the party for doing an act requiring memory and judgment. But it would scarcely be possible for him to lay before the jury all, or the greater part of the circumstances upon which his opinion is based. The judgment which we form as to the mental condition of an acquaintance, depends as much upon his looks and gestures connected with his conversation and conduct, as upon the words and actions themselves, and yet it would be a hopeless task for the most gifted person to clothe in language all the minute particulars, with their necessary accompaniments and qualifications, which have led to the conclusion which he has formed. I am of the opinion that the question of testamentary competency, or what is the same thing, of mental capacity to do an act requiring the faculty of judgment and memory, does, upon principle, form a well-defined exception to the rule which excludes the mere opinions of the witness; and unless the point has been otherwise settled by adjudication which all are bound to regard, the ruling in this case should be sustained.

In testamentary cases in England, I am satisfied that it is the universal practice of the Spiritual Courts to receive the opinions of witnesses who are acquainted with, or have seen and conversed with the alleged testator as to his competency. In White *v.* Driver, which was the case of a contested will, Sir John Nicholl laid great stress upon, if he did not wholly decide the cause, in consequence of the favorable opinion of a friend of the deceased, and of his clergyman, solicitors, nurses and apothecaries, against the pretty strong testimony on the other side. Kinleside *v.* Harrison, arose upon the probate of the will and codicil of a person ninety years old. A great number of witnesses were examined upon the question of the capacity of the deceased, who freely gave their opinions upon one side or the other, differing very much in their conclusions. Sir John Nicholl commenced his elaborate judgment by some remarks upon the difficulties of cases of this nature. In the first place, he said:

'It may be observed that a large portion of evidence to capacity is evidence of mere opinion, and to matter of opinion

mankind differ even to a proverb.' Further on, he observes, that discrepancy would arise; 'first, from the different abilities of witnesses to form such opinions; secondly, from their different opportunities of seeing the person; and thirdly, from the different state and condition of the testator's mind at different times. It is certainly true, that the study of the human mind is an abstruse science; the different lines and traits of the understanding are matters which attract the notice and consideration of the intelligent. Ignorant persons and enlightened ones, will form different opinions upon subjects of this kind; ignorant persons, servants, and those in their condition, who form their judgments on the conversations of the kitchen circle, are very apt to form erroneous opinions on matters of this sort; and this will be the case even without throwing in the additional ingredient which takes place in those circles, the loose suspicions and prejudices by which their judgments are often biased and carried out of their true course. In the next place, from the different opportunities persons have of judging, they will form different opinions; persons who see the testator only occasionally, will form different opinions from those who have better opportunities of judging. We know that little appearances, occurring in this way, are extremely fallacious, yet we often find occasional observers depose with great confidence. It frequently happens that the most ignorant are the most confident. This kind of opinion is still more various when the testator's capacity is fluctuating, when he is sometimes better and sometimes worse; and this is generally the case with persons laboring under old age or other infirmities; it is so, even when there is no special attack occasionally operating; accidental cold or other indisposition often renders an old, infirm person worse one day than another. After a good or bad night, a person will be alert or dull; so, after a night's sleep, a person may be active and capable of considerable exertion, even in matters of business, who, in the afternoon, when the process of digestion is going on, shall appear drowsy and stupid, and not able to rouse himself into action. The

humor of a testator will sometimes make him appear almost fatuous, or induce him to rouse himself into exertion as the occasion is either interesting or disagreeable to his inclinations. Now, these considerations, while they tend to reconcile the apparent contradictions of witnesses, render it necessary for the court to weigh such evidence with great attention; to rely but little upon mere opinions; to look at the ground upon which opinions are formed, and to be guided in our judgment by facts proved and by acts done, rather than by the judgment of others.' I have referred to these remarks so much at large, depreciatory though they are of the kind of testimony in question, in order to show, that though opinions are entitled to but little confidence, except when connected with and supported by facts, yet that it was not thought of, that they might be excluded altogether as incompetent. To show that opinions are habitually received and relied on in these courts, when connected with facts, I might refer to many decisions. The point does not seem to have been distinctly decided in the courts of this State, if we except the recent case in the Supreme Court hereafter noticed. In Jackson *v.* King, where a conveyance was attacked for the alleged incapacity of the grantor, unprofessional witnesses, who were acquainted with him, were examined as to their opinions respecting the soundness of his mind, without so far as it appears any objection having been taken. Those who testified for the plaintiff, based their opinions upon specific facts, which were held by the court not sufficient to warrant the opinions which they expressed. In Clark *v.* Fisher, which was an appeal from a decree of the Surrogate, admitting a will to probate, testimony of the kind under consideration had been received. In commenting upon it the Chancellor, I think, recognizes the rule as contended for by the respondents in this case. He says, in commenting upon the case, that 'the evidence of capacity, in most contested cases, consists in the opinions of witnesses, sometimes with and frequently without the particular facts on which such opinions are founded.' After adverting to the unsatisfactory character of

opinions generally, he adds; 'It is for this reason that opinions of witnesses are never received in evidence when all the facts on which such opinions are founded can be ascertained and made intelligible to the court and jury. And when the opinions of witnesses, from the necessity of the case, are received as evidence, the weight of testimony will not depend so much upon the number, as upon the intelligence of the witnesses, and their capacity to form correct opinions, their means of information, the unprejudiced state of their minds, and the nature of the facts testified to in support of these opinions.' The case of Culver *v.* Haslam, contains an able examination of the precise question now under consideration; and the conclusion arrived at by a majority of the court, that the opinion of a witness acquainted with the individual whose capacity is in question, in connection with those facts and circumstances within the knowledge of the witness, is admissible, meets with my entire assent."

Thus the question stands in New York,—the Court of Appeals having decided with a heavy dissenting sentiment, that none but professional witnesses are competent to testify on the subject of insanity, while the Supreme Court admits the opinions of laymen, —or did, before the Court of Appeals passed upon it. The question can not, therefore, be considered as settled, even in that State.

In Pennsylvania, the point seems to be settled in favor of admitting the testimony of non-professional witnesses. In the case of Rambler *v.* Tryan,[1] the right of the defendant depended upon the validity of a will, which was impeached by the plaintiff on the ground of the imbecility of mind of the alleged testator; and witnesses who had known him intimately from his childhood to his death, were offered to prove certain facts tending to show an extraordinary dul ness of understanding, followed up by the opinions of the witnesses, founded on these facts, that he was incapable, from defect of understanding, to make a will. The court admitted the evidence, and the defendent excepted. In

[1] 7 Serg. & Rawle, 90.

reviewing this ruling, the court said they did not know how otherwise the alleged imbecility of mind could be proved, than by the evidence of those who grew up with him, who marked his conduct in infancy, in the prime of life, and in his decline. The opinion of witnesses, they said, without stating the grounds of such opinions, ought not to be received. But when they state facts indicative of want of common intellect, their opinion is always received. In Wogan *v.* Small,[1] on the trial of an issue of *devisavit vel non*, the plaintiff was allowed to ask a witness, sworn in his behalf, whether, from his actual knowledge of Peter Eipe, the supposed testator, he considered him unfit to make a will, and a motion for a new trial for an alleged error in that respect was denied.

The same view has been taken of the question, in Connecticut. An action on a promissory note was defended on the ground of the insanity of the defendant. On the trial, the court rejected the mere opinion of the witnesses, but permitted them to state their opinions in connection with facts on which such opinions were founded, that there was a continued and uninterrupted lunacy and total want of understanding of the defendant, commencing at a time prior to, and continuous at, and after the execution of the note. The opinion of the court upon the exceptions, was given by Chief-Justice Hosmer, who declared that the judge, at the trial, "discriminated soundly and legally," and that the holding was sanctioned by the usual practice of courts in such cases.[2] In the subsequent case of Kinne *v.* Kinne, similar testimony was received, upon which the court remarked, that upon the facts stated in support of the opinions, the triers would draw the inference as to the state of the testator's mind.

In Indiana, the rule is stated to be, that the opinions of unprofessional witnesses may be taken as to the sanity of a testator or grantor, but the facts upon which the opinions are founded

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[1] 11 Serg. & Rawle, 141.

[2] Grant *v.* Thompson, 4 Conn. 203.

must also be stated.[1] It has been so held in Tennessee, North Carolina and Ohio.[2]

The Supreme Court of Ohio, in passing upon this point, said: "It may be impossible for a physician, who has not become familiar by experience, with some of the peculiar, indefinable, but certain indicia of insanity, in a case where it is feigned, to determine that it is so, without watching the patient by night, as well as by day, for some time, and when he does not know that he is watched, to see whether he can resist hunger, cold and sleep, and whether his conduct affords any sure test to distinguish feigned appearances, assumed for a particular purpose, from a case of real disordered intellect. It is idle to suppose that none but medical men can do this; and as idle to assume that, when done by an intelligent observer, his conclusions would be worthless. Doubtless an opinion formed by a person professionally conversant with disease, upon the same observations, would be the most reliable; but if formed upon any relation of the facts which the observer would be able to give, it would be difficult to say, in many cases, that it would be the safest. A careful daily observer of a person feigning madness, would witness innumerable acts, motions and expressions of countenance, which, with the attending incidents and circumstances, conclusively satisfying him of the fictitious character of the pretended malady; but which he could never communicate to a jury of scientific men, so as to give them a fair conception of their real importance.

From the poverty of language, these facts, should a witness attempt to detail them, would necessarily be mixed up with opinions, general or partial, in spite of his best efforts to avoid it. There are things well known to all persons, which our language only enables us to express by words of comparison,—such are the peculiar features of the face indicating an excitement of the

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[1] Doe *v.* Reagan, 5 Black. 217.

[2] Gibson *v.* Gibson, 9 Yerger, 329; Clary *v.* Clary, 2 Iredell's Law Rep. 78; The State *v.* Clark, 12 Ohio, 483.

passions, affections and emotions of the mind, as hope, fear, love, hatred, pleasure, pain, etc. Testimony affirming the existence or absence of either of these, is but a matter of opinion. So, the statement of the fact that a man's whole conduct is natural, is but the opinion of the witness, formed by comparing the particular conduct spoken of with the acts of the past life of the individual It would hardly be claimed that such evidence should be excluded, yet it is equivalent to an opinion that the person is sane. We are not now considering whether the professional witness shall be permitted to give an opinion upon the question of sanity, and under what circumstances, but whether, in the absence of such testimony, and under any circumstances, an opinion may be evidence, coming from non-professional witnesses. Medical testimony is of too much importance to be disregarded. When delivered with caution, and without bias in favor of either party, or in aid of some speculative and favorite theory, it becomes a salutary means of preventing even intelligent juries from following a popular prejudice, and deciding on inconsistent and unsound principles. But it should be given with great care, and received with the utmost caution, and like the opinions of neighbors and acquaintances, should be regarded as of little weight if not well sustained by reasons and facts that admit of no misconstruction, and supported by authority of acknowledged credit."

In Vermont, it is stated by the court, in two cases, that upon questions of insanity, witnesses, not professional men, may be permitted to give their opinion in connection with facts observed by them; but in neither of the cases was the question material to the judgment which was given.[1]

In the Circuit Court of the United States, sitting in New Jersey, it was held on trial of an issue *devisavit vel non*, that a witness might be asked what opinion he had formed of the sanity of the testator at about the time of the will being made.[2] It is

[1] Lester *v.* Pittsford, 7 Verm. 158; Morse *v.* Crawford, 19 Id. 499.

[2] Harrison *v.* Rowan, 3 Wash. C. C. R. 580.

presumed that the witness was acquainted with the testator, though the fact is not distinctly stated.

This exact question does not seem to have been decided in the courts of Massachusetts. In Needham *v.* Ide,[1] MORTON, J., instructed the jury, in a probate case, to the effect that the attesting witnesses might lawfully give their opinions as to the testator's sanity, "but that *mere opinions* of other witnesses were not competent evidence, and were not entitled to any weight, further than they were supported by the facts and circumstances proved on the trial." This charge was approved by the Supreme Judicial Court.[2] Judge Denio, in the case already referred to, says: "If a rule could be formed which should confine the evidence of opinions, in this class of cases, to witnesses who were well-informed, judicious and discriminating, and whose opportunities of observing the mental operations of the individual whose competency was in question, were ample, and who were, moreover, free from bias, no one would seriously object to the doctrine of admitting it to be given. But a rule so limited would be obviously impracticable, from the number of collateral issues which it would involve. There are, however, certain qualifications which are indispensable. In the first place, the witness whose opinion is received, should be one acquainted with the person of whom he is to speak, and should have heard him converse, and have observed his conduct generally, or in respect to some particular transaction, and the opinions should be such as the witness has formed from his own observation, and not from information otherwise derived; and in the next place, if his opinion is unfavorable to the competency of the party, he should relate, so far as he is able, the facts upon which it is based. With these necessary limitations, we think such evidence should be received, and that its weight may be safely left to the decision of the jury."

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[1] 5 Pick. 510.

[2] Dickinson *v.* Barber, 9 Mass. 225; Poole *v.* Richardson, 3 Id. 330.

CHAPTER XXXI.

WHAT MENTAL INCAPACITY INVALIDATES A WILL.

Wills are wholly void, unless the testator is in a competent state of mind. Lord Coke laid down the rule of law upon this subject, thus: "It is not enough," he says, "that the testator, when he makes his will, should have sufficient memory to answer familiar and usual questions, but he ought to have a disposing memory, so as to be able to make a disposition of his lands with understanding and reason; this," he adds, "is such a memory as the law calls sane and perfect."[1] Mr. Phillipps says: "Apparent sanity, on some subjects, is not conclusive proof that delusion on particular subjects, and showing itself on particular occasions, does not exist. And it seems that, in civil cases, this partial insanity, if existing at the time of an act done, invalidates that act, though it be not directly connected with it. It has been said, that, when there is delusion of mind, there is insanity; as when persons believe things to exist, which exist only, or, at least, in that degree exist only, in their own imagination, and of the non-existence of which, neither argument nor proof can convince them, and which no rational person could have believed. This delusion may sometimes exist on one or two particular subjects, though, generally, there are other concomitant circumstances, such as eccentricity, irritability, violence, suspicion, exaggeration, inconsistency, and other marks and symptoms which may tend to confirm the existence of delusion, and to establish its insane character.[2]

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[1] Stewart *v.* Lispenard, 26 Wend. 255; 9 Paige, 618.

[2] Dew *v.* Clark, East. T. 1826, Edited by Dr. Haggard.

If a party impeaches the validity of a will on account of a supposed incapacity of mind in the testator, from whatever cause it may proceed, whether from natural decay of intellect, from derangement, or partial insanity, it will be incumbent on him to establish such incapacity, by the clearest and most satisfactory evidence.[1] The burden of proof rests upon the party attempting to invalidate what, on its face, purports to be a legal act. If he succeeds in proving that the testator had been affected by habitual derangement, then it is for the other party, who claims under the will, to adduce satisfactory proof, that, at the time of making the will, the testator had a lucid interval, and was restored to the use of his reason.[2] Lord Thurlow has observed, in the case of The Attorney-General *v.* Paruther, "that the evidence in support of the allegation of a lucid interval, after the proof of the derangement, at any particular period, should be as strong a demonstration of such facts, as where the object of the proof is to establish derangement. Perhaps it would be more just to observe that, if on the one side derangement has been clearly proved, a lucid interval must also be clearly and satisfactorally proved on the other side. But there appears no reason for requiring, in the proof of each of these several facts, precisely the same measure of evidence or the same degree of demonstration. It is possible, that both facts may be the most satisfactorally established, though the proof in the one case may, perhaps, not be stronger or so demonstrative as in the other. Insanity, from its peculiar nature, admits of more easy and obvious proofs, than the existence of a lucid interval. The wildness and unnatural appearance of insanity can never be misunderstood; but whether light and reason have been restored, is often a question of the greatest difficulty. It may happen, therefore, that insanity, at a particular period, is established by such a body

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[1] White *v.* Wilson, 13 Ves. Juris. 89.

[2] Stewart *v.* Redditt, 3 Md. 67; Levy *v.* Buffington, 11 Geo. R. 337; Fitzhugh *v.* Wilcox, 12 Barb. 235.

of cogent evidences, as to dissipate every possible shade of doubt, and to convince the mind of the truth of the fact, as strongly as of its own existence. But to insist on the same weight of evidence, and the same degree of demonstration in the proof of a lucid interval, is requiring more than almost any case can be expected to supply, and perhaps more than the nature of the question will generally admit. It is scarcely possible, indeed, to be too strongly impressed with the great degree of caution necessary to be observed in examining the proof of a lucid interval; but the law recognizes acts done during such an interval as valid, and the law must not be defeated by any overstrained demands of the proof of the fact."[1]

Nor can it be necessary to prove, that the patient had been restored to as perfect a state of mind as that which existed before his derangement, in order to be competent to make his will, or to do any other legal act. "The strongest mind," says Lord Eldon, "may be reduced, by the delirium of a fever, or some other cause, to a very inferior degree of capacity; but the conclusion is not just, that because the person is not what he had been, he should not, therefore, be allowed to make a will."[2] Mr. Phillipps says: "A great intellect may lose half its powers, and still retain more reason than falls to the lot of the common order of minds." All that the law requires is that the person should be restored to a "disposing mind," capable of doing an act of thought and judgment; not that he should regain all the powers of intellect which distinguished him before the malady.[3]

Some important observations on the subject of lucid intervals have been made by Sir W. Wynne, in a case lately reported, in the Court of Prerogative. After observing that a person is not incapacitated, even after general habitual insanity, provided there is an intermission of the disorder at the time of the act, and

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[1] Sir John Nicholl's Judgment in White *v.* Driver.

[2] Exparte Holyland, 11 Ves. 11.

[3] Idem.

that where an habitual insanity is established, then the party who would take advantage of the fact of an interval of reason, must prove such fact; he proceeds thus: "Now I think the strongest and best proof, that can arise, as to the lucid interval, is that which arises from the act itself; that I look upon as the thing to be first examined; and if it can be proved and established that it is a rational act, rationally done, the whole case is proved. In my apprehension, when you are able completely to establish that, the law does not require you to go further; and the citation from Swinburne states it to be so. The manner in which he has laid it down is, if a lunatic person, or one that is beside himself at times, but not continually, makes his testament, and it is not known whether the same were made while he was of a sound mind and memory, or not, then, in case the testament be so conceived as thereby no argument of phrensy or folly can be gathered, it is to be presumed, that the same was made during the time of his calm and clear intermission, and so the testament shall be adjudged good; yea, although it can not be proved, that the testator useth to have any clear and quiet intermissions at all, yet, nevertheless, I suppose, that if the testament be wisely and orderly framed, the same ought to be accepted for a lawful testament. Unquestionably, there must be a complete and absolute proof, that the party who has so framed it, did it without any assistance. If the fact be so, that he has done without assistance, as rational an act as can be, what more is there to be proved? I do not know, unless it can be shown, by any authority, or law, what the length of the lucid interval is to be, whether an hour, a day or a month. I know no such law as that. All that is wanting is, that it should be of sufficient length to do the rational act intended. I look upon it, if you are able to establish the fact, that the act done is perfectly proper, and that the party who is alleged to have done it, was free from the disorder at the time, that is completely sufficient."[1]

[1] 3 Phillipps on Ev. 606-7; 1 Williams on Executors, p. 17—30; 1 Jarman on Wills, ch. 3; Johnson *v.* Moore's heirs, 1 Little's Reports, 371.

CHAPTER XXXII.

POISONS—GENERAL PRINCIPLES AND OBSERVATIONS.

Next to the questions relating to insanity, those connected with poisons give most trouble to the medical witness and to the courts.

The plan we have adopted, and which will be followed as far as possible in what we have to say on the subject of poisons, is to simply record what is now considered *settled* and *reliable* authority in this department of Medical Jurisprudence. While this course will greatly abridge the subject in some respects, compared with the manner in which it is usually treated, it will also be more satisfactory and useful to the lawyer and to the medical witness.

The disputed questions, and theories connected with poisons, must be fully discussed in the proper place; but it is very questionable whether that place is within the narrow compass of a text-book upon Medical Jurisprudence.

Those who would examine the matter in detail, will find all they wish upon the subject in Taylor's work upon poisons, or that of Mr. Christison, and also in the several works upon Materia Medica, as well as in most works on Medical Jurisprudence.[1]

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[1] Taylor's Medical Juris.; Christison on Poisons; Palmer's Trial, England, London Ed. 1856; 2 Beck's Elements, p. 573; Orfila, Vol. 18, p. 5; Thompson, p. 477; Guy's For. Med.; W. & S., Med. Juris. 501, 105; Wharton's Crim. Law, p. 453; Wills on Circum. Ev. 209; Roscoe's Crim. Law, 702; Bishop's Crim. Law, Sec. 1 517, 519; Mittermaier, Deutsch. Straf., Sec. 124; Meckel, Lehrb, Sec. 145; Ann. d'Hygiene et de Med. Leg., Juellet, 1830, p. 365; Fodere Med. Leg., 3, p. 449; Lafarge case, Raspoil, Paris, 1840; Puccinotti Med. Leg., p. 195—255; Celebrated Trials, p. 140. For a large number of references to German and French authorities, see American Criminal Law, p. 453—457.

The great number of agents that may be poisonous to the human system,—the imperfection of the tests used to detect many of them,—the great variety of symptoms which result from poisons, often resembling those attending natural disease,—the diabolical skill and ingenuity practised by the criminal in their administration,—all tend to complicate and embarrass the medical witness in determining what poisonous agent has been used, if any, and what its effect, in a case of alleged poisoning. Then there are the idiosyncrasies of constitution, and active or latent disease in the system, rendering the exact effect of a poisonous agent in many cases, extremely doubtful.

Although there may be at this day no professional poisoners, like Brinvilliers, or Anna Maria Zwanziger, yet the increasing frequency of criminal poisoning is actually alarming.

It appears from the Registrar General's Report and from other sources, that in England there are about one thousand six hundred known cases of poisoning per annum. We see no reason to doubt but that the murders in this country, from poisoning, may equal those of England, in proportion to our population. The popular knowledge of the effect of the most dangerous and deadly of the poisons, and the facilities for obtaining them are such, that poisoning has become, perhaps, the most common form of homicide.

No class of cases, therefore, can be fraught with more importance to the public, or to the individual arraigned for having administered one of these deadly agents for the purpose of taking life. In them the medical witness is aided by no well-defined lines, or positive knowledge, as a general thing, in their elucidation, except by analysis, in the case of a few poisons. He has not even the aid of a clear definition of the term poison. It will trouble him to draw a boundary line between a poison and a medicine. Dr. Taylor says it can not be done.

M. Bernard thinks a correct definition of a poison is impossible. Let this be as it may, no complete definition is to be found, notwithstanding almost every author upon the subject tries

to frame one. Legislators in their statutory acts, do not pretend to define the meaning of the term when used therein. In the English statute, it is enacted *inter alia*, "that whosoever shall administer any *poison* or other *destructive thing*, with intent to commit murder, shall be guilty of felony, and upon being convicted thereof shall suffer death." Here the meaning of the two important terms *poison* and *destructive thing* is to be determined by the medical witness, if determined at all. And how can there be a conviction until the terms of the statute are positively defined?

In Ohio, and perhaps most of the other States, the statutory language is, "that if any person or persons shall administer *poison* to another," etc., leaving the meaning of the term to be settled by the courts.

Some articles, simple and harmless in themselves, as used by people in general, may, by reason of some idiosyncrasy, be deadly poisons to some. Yet, they are not poisons, in a general sense. Those articles that act by reason of a peculiar temporary condition of the system, as cold water on a heated circulation; or in a mechanical way, such as steel or glass, or needles, are not poisons; still the effect in some cases may be poisonous.

Dr. Guy defines a poison as follows: "A poison is any substance which, when applied to the body externally, or in any way introduced into the system, without acting mechanically, but by its own inherent qualities, is capable of destroying life." Mr. Taylor does not attempt a definition, but says: "Perhaps the most comprehensive definition which may be suggested is this: A poison is a substance which, when taken internally, is capable of destroying life without acting mechanically on the system." This definition is at fault in this, making it essential that the agent must be taken *internally*. Other attempts at a definition have been made, but with no better success.

The term, *deadly*, is often used in indictments. It should not be used unless it is certain that one of the most potent poisons, like prussic acid or strychnine, has been given. When the question is put to the medical witness, as to the deadly character of

a particularly deleterious medicine, he should confine the term deadly, to prussic acid, morphine, strychnine, and a few others of the most virulent kind. Other agents, poisonous in their character, may produce death, and in that sense they are *deadly*, but it is those that produce death in small quantities, and with great rapidity, that are really and technically "deadly," in law or medicine. Some poisons act upon specific organs, and leave other parts of the system comparatively uninjured. Tobacco, hemlock, digitalis and upas antiar, produce a paralyzing effect upon the heart. Tartar emetic, inflames the mucous membrane and the lungs. The narcotic, and narcotico-acrid poisons affect the brain. Strychnia affects the spinal cord, producing violent attacks of tetanus, and oxalic acid sometimes produces the same effect. Arsenic also produces inflammation of the mucous membrane, like antimony, and sometimes affects the heart like digitalis, and the brain like the narcotics, and the muscular system like lead. Mercury attacks the salivary glands, cantharides the bladder, manganese and copper the liver, iodine the lymphatic glands, lead the muscular system generally, spurred rye—ergot,—produces gangrene of the limbs, and acts specifically upon the uterus, and chromate of potassa, on the conjunctiva of the eyes.

Most poisons act by entering the circulation, while some operate through sympathy. Some, that enter the blood-vessels, impress the sentient extremities of the nerves, and hence are carried to the great nervous centers, and to the organs, upon which they act specifically.

The more soluble any poison is when administered, the sooner and more certainly it operates upon the system; and when mixed with food or mucilage, the effect produced is comparatively slow and uncertain. When there is a chemical combination formed in the stomach, as a general result, the poison is destroyed.

It is a singular fact, that those animal poisons which find their way into the system through a sting, or poisonous cyst, do not always thus affect the system when introduced into the stomach. Thus, the venomous poison from a viper or mad dog,

may be taken into the stomach with impunity. It would seem that these poisons are not absorbed into the system through the mucous membrane, but must be introduced directly into the circulation.

While some poisonous agents, like opium, alcohol and tobacco, lose their effect by continued use, others, like arsenic and mercury, have a more positive and certain effect, the oftener they are repeated. Zinc and antimony, on the other hand, may be taken by a healthy person, in continually increasing doses, with the same effect.

From some idiosyncrasy of constitution, some articles, whose action is well known to be innocent in their general effect, may prove a poison. Epsom salts has sometimes acted like opium, and opium like the salts,—this, however, is rare. Ipecacuanha is sometimes poisonous.

In disease, poisons do not act upon the system as in health; indeed, all medicines are said to be poisonous to the system in its normal condition, but in disease they act differently, and, if given properly, act innocently and beneficially. This does not apply to those poisons, the action of which tends to produce the same state that already exists; for irritants would increase an inflammation of the mucous membrane, if given internally, and narcotics might aggravate a difficulty of the brain.

Poisoning may be reasonably suspected when a healthy person is suddenly taken sick, after having swallowed moderately of a usually healthy article. If the poison taken is soluble, the symptoms may appear suddenly, but if in a solid shape, hours may elapse before the poisonous effect is produced, and the cause may be thus entirely lost sight of.

Much reliance may be placed on the post mortem appearances, when any of the irritant poisons have been taken; but the vegetable poisons leave but few traces for the anatomist or pathologist to follow indicative of the agent of death.

Tetanic convulsions are sure to attend poisonous doses of strychnine. When arsenic has been administered, there is generally,—

but not always,—traces of its effects in the mucous membrane, especially of the stomach. If it still exists in the system, the chemist will find it,—even in the smallest quantities. It may have been taken in sufficiently large doses to produce death, and yet leave no post mortem appearance indicating that agency,—not a particle being found by the chemist in the system, because vomiting will sometimes relieve the system from its presence, or it may be eliminated by the kidneys, after having done the work of death. The body of the deceased, having died from the effect of arsenic, is generally found in a wonderful state of preservation, from the antiseptic nature of the poison.

Disease is liable to be mistaken for poisoning, and poisoning for disease. Cholera may be mistaken for poisoning, because of the suddenness of its invasion of the system,—the vomiting and purging that attends it,—and its usual fatal termination. The witness must study well the distinctive character of this disease. Gastritis, enteritis, gastro-enteritis, and peritonitis, resemble, in many respects, the effects produced by irritant poisons, as does also perforation of the stomach and intestines. Intussusception of the bowels may be taken for poisoning. Colic may be mistaken for lead poisoning.

The above diseases are confounded with irritant poisoning; while apoplexy, epilepsy, tetanus, convulsions generally, diseases of the spinal marrow and brain and heart, are, without much care and experience, mistaken for neurotic poisoning. The effect of various accidents also, often resemble poisoning.

It is well to remember that sleep, intoxication, a full stomach and disease, render poisons slower in their operation.

It is now well settled, that the system does not adapt itself, as was once supposed, to the use of mineral poisons, so that a large quantity can be introduced by habit into the system with impunity. The system may, to some considerable extent, become reconciled to the use of vegetable or organic poisons, so that large doses will be tolerated, as in the case of opium or tobacco. If Mithridates fed on poison, until it became as nutriment,

the poison must have been opium. It is, however, but a poetic license, that permitted him to thus indulge in poisons until they became a healthy diet.

These are some of the general points with which the medical witness should be familiar. The counsel also, must understand these leading and settled matters connected with poisons, for they will, to some extent, arise in every case of poisoning.

Mr. Taylor seems to think that in cases of poisoning, more than in any other, the witness is apt to become a "professional witness," or "turn advocate." If his professional brethren in England are one half as bad as he represents them, the condition of medical testimony in that country is truly deplorable. We think, however, he has overdrawn the matter. At least, some of his legal cotemporaries have felt called upon to criticise this feature of his late work on poisons, and defend the medical profession. In the London Law Magazine and Review we find the following:

"There is one point in Dr. Taylor's book which we can not help alluding to. We mean the controversial and personal tone which the author falls into too frequently,—unless indeed it is unavoidable. In the present state of the practice of experts, and the morale of 'professional witnesses,' it may be true that an upright and honorable mind can not avoid taking *every* opportunity of bitterly denouncing the abuse of scientific knowledge, and the disregard of the responsible office of assisting public justice, and securing private rights. Yet we wish the frequency of the attack and exposure of the conduct of certain well-known professional men, were not so perpetually recurring, and so broadly put forth. We are far from saying that the author condemns unfairly; but is it necessary in a standard work to adopt the bitter and pointed language which we are now noticing? We are fully aware of the evils he complains of; indeed, in an article in the Law Magazine for August, 1856, ('The Evidence in Palmer's case,') we have ourselves expressed our opinions strongly with regard to the disreputable mode in which Medical Evidence

is proffered. We there have said: 'The witness-box seems to be sought by some as a cheap advertisement, by others as the means of contradicting or discomfiting a rival; but from whatever cause it may arise, the worst danger to the administration of justice, and the greatest injury to the scientific character, will be incurred whenever it shall be known that professional witnesses may be retained to establish indifferently a case for either side. This is no fanciful danger; for we believe that there are few lawyers of considerable practice who could not, within their experience, give instances of the profligacy with which scientific testimony is tendered, and not in criminal cases only.' And again: 'That there have been frequent occasions when (to use Lord Campbell's expression,) the medical witness is turned into the 'retained advocate,' is as true as it is grievous, and when such occasions occur they call for most unrelenting comment.'

It is not, therefore, that we do not concur with the author in condemning notorious and scandalous misconduct of so-called scientific 'professional' witnesses; but we think, in a standard work like Dr. Taylor's, contemporary culprits need not be so perpetually pilloried. We get tired of perpetually seeing notes of admiration placed after the assertions, doctrines, and imperfections of Dr. Letheby and Mr. Herepath. These seem to be Dr. Taylor's especial aversion, and their inconsistencies are frequent themes of observation. One effect of Dr. Taylor's remarks on this head will be, that every unscrupulous jail attorney or accomplice of felons, who seeks to have a case made out, go up, or carried through, has had plainly indicated to him that there is a market of 'scientific evidence,' where he can procure the testimony best suited to his wants."

We see no reason why the medical witness should yield to improper influences in cases of poisoning particularly;—the difficulties of these cases, may, and probably do, leave a wider margin for a difference of opinion, than in almost any other, and the importance of the issue gives to attorneys good cause, as they think, to magnify these differences; but medical witnesses certainly

should not. There is no doubt but that most Medical Evidence in cases of poisoning, requires a vigorous cross-examination to strip the subject of the mere theory and speculation of witnesses, as well as to determine his honesty and intelligence. The Palmer case, and a great many others upon record, illustrate this necessity.

In most cases, when a mineral poison has been given or taken, a well-informed and expert chemist will detect it. It may, however, require a long and laborious investigation. The substance used, not being known, the experimenter may have to go through a large range of poisons. Hence, the necessity for a liberal provision by law being made, both to encourage and to compensate the chemist in making thorough investigations. When there is fallacy or error, it usually results from the fact that the chemist did not spend time enough upon the case, in trying the several tests as thoroughly as certainty demands. So certain is science in this department, that its results are almost always conclusive and correct, in regard to certain poisons. The examination of the body, together with an examination of the dishes used, the victuals last eaten from, the matter ejected from the somach, and a careful consideration of all the circumstances attending the last sickness, will almost invariably enable the medical witness to detect the cause of death, if from poison. It has already been said, that the presence of poison in the stomach or body does not prove the *corpus delicti*, nor do the other circumstances just enumerated; but when the inference is strong, and the concurrent evidence of the symptoms of the disease of such a nature as to make any other presumption less probable, the offense is sufficiently established.

When the poison is found in the body, or when the unmistakable symptoms of poison are present, and unaccounted for, the probabilities are greatly increased that the death was from poison. Still, it must be remembered; 1, That the absence of poisons in the body, or the failure to find it, does not prove that poison was not the cause of death; 2, That though it is clearly established that poison was taken, it does not prove that

the death resulted therefrom; 3. That though poison is found in the immediate vicinity of the deceased, it don't necessarily follow that he partook of it; 4. Though there may be no trace of poison in the body, as is often the case when vegetable poisons have been taken, the surrounding circumstances and symptoms may point directly to a poisonous agent. Mr. Taylor properly cautions the medical witness against giving a positive opinion, before the process of chemical analysis is complete, when it is instituted. Those who are interested, are very apt to urge the medical witness to give an opinion before he has had time to thoroughly examine the case. It often happens that the last step in the analysis, is the one that determines the question of poison or no poison. In the Boughton case, Dr. Rattray gave an opinion in the first instance, that the poison administered to the deceased was arsenic, but he subsequently attributed death to laurel-water. Taylor speaks of a case where arsenic was pronounced to be present, when really sulphuric acid was the poison; and of another case, where the medical witness stated at the coroner's inquest, that it was arsenic, when it was afterward found to be oxalic acid. In another case, the witness said oxalic acid had been given, when it turned out to be arsenic.

This mistake respecting the nature of the poison, not only impedes and prevents the attainment of justice, but it seriously affects the reputation of a witness. It all arises from, either ignorance, or from hasty and ill-formed opinions. It is a rule, that no opinion should be formed from a few experiments, and; 2. That no opinion should be expressed until the analysis is completed. Where the medical witness is obliged to acknowledge, on cross-examination, that he has once been mistaken on a question so important, and requiring so decided an answer, a jury may be induced to believe that the witness may have made a second mistake, and that his last positive opinion, is of no more value than that which he first expressed, and afterward retracted.[1]

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[1] Taylor's Med. Juris. 56.

We will next examine the action of the courts, in regard to cases of poisoning and Medical Evidence therein, before we proceed to consider the different kinds of poisonous agents. As most substances denominated poisons, may, under certain circumstances, be used and act as medicines, and, under other circumstances, the same agents may be dangerous to life or injurious to health; the *intent* of the party determines the character of the act. Upon this intent, therefore, more than upon the exact nature of the agent used, does the criminality of the act depend.

Mr. Roscoe makes the following judicious remarks, on the evidence of medical men in cases of murder by poisoning: "In proving murder by poisoning, the evidence of medical men is frequently required, and in applying that evidence to the facts of the case, it is not unusual for difficulties to occur. Upon this subject the following observations are well deserving of attention. In general, it may be taken, that where the testimonials of professional men are affirmative, they may be safely credited; but where negative, they do not appear to amount to a disproof of a charge otherwise established by strong, various, and independent evidence. Thus, on the view of a body after death, on suspicion of poison, a physician may see cause for not positively pronouncing that the party died by poison; yet, if the party charged be interested in the death,—if he appears to have made preparations of poison without any probable just motive, and this secretly; if it be in evidence that he has in other instances brought the life of the deceased into hazard; if he has discovered an expectation of the fatal event; if that event has taken place suddenly, and without previous circumstances of ill-health; if he has endeavored to stifle the inquiry by prematurely burying the body, and afterward, on inspection, signs agreeing with poison are observed, though such as medical men will not positively affirm could not be owing to any other cause, the accumulative strength of circumstantial evidence may be such as to warrant a conviction, since more can not be required than that the charge should be rendered highly credible from a variety

of detached points of proof, and that supposing poison to have been employed, stronger demonstrations could not reasonably have been expected, under all the circumstances, to have been produced."[1]

The same distinguished author, makes this distinction between principal and accessory, in cases of murder by poisoning, and murder resulting from other causes. "With regard to the law of principal and accessory, there is a distinction between the case of murder by poison, and other modes of killing. In general, in order to render a party guilty as principal, it is necessary, either that he should, with his own hand, have committed the offense, or that he should have been present aiding and abetting; but in the case of killing by poison it is otherwise. If A., with an intention to destroy B., lays the poison in his way, and B. takes it and dies, A., though absent when the poison is taken, is a principal. So if A. had prepared the poison, and delivered it to D., to be administered to B., as a medicine, and D., in the absence of A., accordingly administered it, *not knowing that* it was poison, and B. had died of it, A., would have been guilty of murder as principal, for D. being innocent, A. must have gone unpunished, unless he could be considered as principal. But if D. had known of the poison as well as A. did, he would have been a principal in the murder, and A. would have been accessory before the fact."[2]

Where an indictment for the murder of A. B. by poison, stated that the prisoner gave and administered a certain deadly poison, and was supported by proof that the prisoner gave the poison to C. D. to administer as a medicine to A. B., but C. D. neglecting to do so, it was accidentally given to A. B. by a child, it is sufficient; the prisoner's intention throughout being to murder.[3]

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[1] Roscoe's Criminal Evidence, 701.

[2] Roscoe's, Crim. Ev. 702; Foster, 349.

[3] R. *v.* Michael, 2 Moo. C. C. 120; 38 Eng. Com. L. R. 152.

It has been held that an "attempt to poison," is not committed by administering a substance not poisonous, even though believed to be so; because, if it actually killed the person, he would not have been poisoned to death.[1]

Though the poisonous article given may be completely protected, so that its poisonous properties are not manifested, the intent being to kill, the person administering it, is as guilty as if it had not been thus protected. The English judges have unanimously held, under a statute against administering "poison or other destructive thing," with intent to kill, that cocculus indicus berries, while inclosed in their exterior pod unbroken, given to a child nine weeks old, are poisonous; though, by reason of this covering, over the poisonous part, they could not, as they did not, harm the child.[2]

An indictment for mixing sponge with milk, with intent to poison, has been held bad, for not setting out that the sponge was of a deleterious or poisonous nature.[3]

When the prisoner gave the prosecutor a cake containing poison, which she merely put into her mouth, and spit out again without swallowing it; the judge held that a mere delivery did not constitute a crime within the act of 43 Geo. 3, c. 58, and that there was no administering unless the poison was taken into the stomach.[4] Harley's case settles the point, that to constitute an administering, there need not be an actual delivery by the hand of the prisoner.

A servant having put poison into a coffee-pot, and when her mistress came down to breakfast, told her that she had put the coffee-pot there for her, and the mistress drank of the poisoned coffee; it

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[1] The State *v.* Clarissa, 11 Ala. 57; Commonwealth *v.* Manley, 12 Pick. 173; Rex *v.* Coe. 6 Car. & P. 403; Reg. *v.* Williams, 1 Den. C. C. 39; Rex *v.* Hughs, 5 Car. & P. 126; Rex *v.* Leddington, 9 Car. & P. 79.

[2] Reg. *v.* Cluderay, 1 Den. C. C. 515; Car. &. K. 907; 1 Temp. &. M. 219.

[3] Rex. *v.* Powells, 4 Car. &. P. 571.

[4] Codman's case; Harley's case, 4 C. & P. 370, where the Report of this Case in 1 Moo. C. C. 114 is stated to be inaccurate.

was held by Park, J., that it was not necessary, in order to an "administering," that there should be a delivery by the hand, and that this was "a causing to be taken," within the 9 Geo. 4. So, where the prisoner knowingly gave poison to A., to administer to B. as a medicine, and it was accidentally given to B. by a child, the judge held this to be an administering by the prisoner.[1] When A. sent poison, intending it for B., with intent to kill B., and it came into the possession of C., who took it, but did not die, Gurney, B., held this to be an administering within the statute.[2]

Where poison is given to produce abortion, the nature of it must be proven.

It is to be borne in mind, that because poison has been administered, it does not follow necessarily, that the death resulted therefrom.[3]

Either because poisoning is more frequently practiced in Europe than in this country, or for some other reason, a more thorough legal examination is made there, on the least suspicion of poisoning, than here. In Germany, in particular, it is the duty of the officer who prosecutes, as soon as there is the least suspicion, to secure the services of thorough chemists, and a professed forensic physician, to make an analysis and pathological diagnosis of the case. In this country, the law does not make it the duty of any person to make these examinations, which are of the greatest importance in detecting the presence of poison. It is usually done in important cases, but it is done voluntarily by the profession, and usually without any certain prospect of an adequate compensation. The chemical analysis of the viscera of a dead person, in search of an unknown poison, is a tedious process, often costly and nauseating in the extreme. The courts should pay the chemist liberally.

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[1] R. *v.* Michael, 2 Moo. C. C. 120; 9 C. &. P. 356.

[2] R. *v.* Lewins, C. C. &. P. 161.

[3] Wills on Circum. Ev. 209; Wharton's Crim. Law, Sec. 749.

CHAPTER XXXIII.

ARSENIC—FATAL DOSE—SYMPTOMS—POST MORTEM EXAMINATIONS.

Arsenic is perhaps the most popular criminal poison in existence, or the agent most frequently selected for criminal purposes; while opium is the one most commonly selected by the suicide.

The fatal properties of arsenic being generally known,—the small quantity required to produce a deadly effect,—the facility and certainty of its action,—its acquisition being easy, and the effect resembling the symptoms of inflammatory disease; all tend to make it the most common drug employed by the murderer. This poison is better known and understood by toxicoligists than any other.

Arsenic is not a natural or constituent element of the human body, nor does it remain there indefinitely when taken.

Properties of Arsenic.—Arsenic is slightly soluble in cold water, dissolving from one half to a grain of arsenic to the ounce of water. In hot water more of the mineral is held in solution. The presence of organic matter in the liquid, renders the poison less soluble, as in the case of milk, or tea, with milk and sugar. Though less soluble in milk, coffee, tea, brandy and the like, than in distilled water, it is sufficiently so to render those articles poisonous. Mucilaginous liquids suspend the arsenic mechanically. Mr. Taylor says: "A medical witness must always take care to draw a distinction between the actual solution and the mechanical suspension of the poison in a viscid liquid, especially when it is necessary to determine whether the quantity taken was sufficient to kill." The case of Madeline Smith involved a point of this nature. A doubt was raised whether eighty-eight grains

of arsenic, (found in the stomach,) could have been taken unknowingly, and it was considered difficult to suggest a vehicle in which so large a dose could have been secretly administered. There is no doubt that this, or even a still larger dose of powdered arsenic might be secretly administered in such liquids as gruel or cocoa.

Fatal Dose.—Dr. Christison places the smallest fatal dose of arsenic in powder at thirty grains. It produced death in six days. The smallest fatal dose in solution he puts at four and a half grains, killing a child of four years of age in six hours. Mr. Guy thinks the minimum of a fatal dose is four and a half grains. Prof. R. O. Doremus, a distinguished chemist of New York, stated in the Stephens case, where he was a witness, and testified with great credit to himself and honor to his profession, that "a fatal dose of arsenic was variously estimated, at from one quarter to four grains," the amount requisite to produce death, depending upon the manner of its administration, and age, constitution, etc., of the victim.

Mr. Taylor says: "facts will justify a medical witness in stating that, under circumstances favorable to its operation, the fatal dose of this poison is from two to three grains. When the dose is below two grains, although the symptoms of poisoning may be violently developed, the person generally recovers."

While the general rule may be as above stated, yet, a very small dose will sometimes produce dangerous symptoms or even death, while in other cases a very large amount may be taken without such a result. Dr. Burns has reported the case of a young female, who very nearly lost her life from one-fifth of a grain of arsenic. Mr. Taylor mentions a case where a physician took sixty grains and recovered, though suffering severely.

The medical witness should not be expected to give the quantity of a dose of arsenic from subsequent appearances, nor the time when taken.

Symptoms—Different persons are affected variously by arsenic, as to the length of time that transpires before the symptoms appear, as well as to the attending symptoms themselves. Within an

hour after the poison is taken its effects are usually manifested. Dr. Christison has seen an instance where the symptoms appeared in eight minutes, and Mr. Taylor has known them to appear in fifteen minutes; and on the other hand, he mentions a case where one drachm was taken on an empty stomach and no symptoms appeared for two hours. Dr. Thompson gives a case, in which from thirty to forty grains of arsenic were taken, and yet there were no symptoms of poisoning for five or six hours. A case is mentioned where the poisonous effects did not appear for ten hours. This case Mr. Taylor calls "the maximum period yet known."

The exact nature of the symptoms of arsenical poisoning and their distinctive features, should be well understood by the medical witness, so far as it is possible.

In an acute case, the first symptoms manifested are faintness, nausea, with an intense burning pain in the stomach, which is increased by pressure. This pain in the stomach, Mrs. Stephens described as a "ball of fire." The matter vomited is generally turbid and brown, mixed with mucus, and occasionally with blood. There is also at times purging, with cramps. The color of the matter vomited, depends partly upon the kind of arsenic taken, and its nature may, therefore, be inferred sometimes from the color of the evacuations. In the case of L'Angelier, who was supposed to have been poisoned by Madeline Smith, it was in evidence that he vomited a greenish colored matter of the thickness of gruel, and it was therefore inferred that the blue arsenic was used. Blue arsenic was traced to the prisoner.[1] There is intense thirst, constrictions, and burning in the throat. The pulse is small, frequent, and irregular; the skin cold and clammy in the latter stage, when there is also paralysis, tetanic convulsions, or spasms. These symptoms are in general continuous in fatal cases, though there may be remissions or interruptions. Some of these symptoms, if not all, will be present in almost every case of arsenical poisoning.

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[1] Reg. *v.* Smith, Irvine's R. 30, Edinburgh; Taylor.

In a case recorded by Taylor, three hundred and forty children were poisoned at one time accidentally, and the symptoms in them all varied but slightly. There was shivering, with pains in the stomach and bowels, and vomiting of a clear mucous fluid of a green color.

In case of chronic poisoning, there will be inflammation of the conjunctiva, with suffusion of the eyes and intolerance of light. This may take place in acute poisoning. The skin become affected by a vesicular eruption called "eczema arsenicale." The symptoms that follow chronic poisoning are those that indicate a general and rapid giving way or breaking up of the powers of life.

Post mortem Appearances.—Arsenic produces but few changes, as shown by a post mortem examination, except in the stomach and intestines. Having a specific effect upon the mucous membrane of the stomach, it is in that organ that the greatest visible effects are found. It generally presents a red, inflamed surface. Mr. Taylor says: "The mucous membrane of the stomach, which is often covered with a thick layer of mucus mixed with blood, and with scattered, white, pasty-looking patches of arsenious acid, is commonly found red and inflamed; the color, which is sometimes of a dull or brownish red, becomes brighter on exposure to the air, at other times it is of a deep crimson hue, interspersed with black-looking streaks or patches of altered blood. The redness is usually most strongly marked at the greater extremity: in one case it may be found spread over the whole mucous surface, giving to it the appearance of red velvet,—in another it will be chiefly seen on the prominences of the folds. It frequently assumes a dotted or striated form, stretching in curved lines between the two openings of the stomach. Blood of a dark color is effused in various parts between the folds, or beneath the lining membrane, an appearance which has been mistaken for gangrene. The stomach often contains a mucus liquid tinged with blood. The coats are sometimes thickened in patches, being raised up into a sort of fungus-like tumor, with arsenic imbedded in them;

at other times they have been found thinned; and in others of a glutinous consistency and appearance. The mucous membrane is rarely ulcerated, and still more rarely gangrenous. Perforation is but very rarely found after arsenical poisoning."[1]

Inflammation will supervene in from two to six hours after the poison has been taken, and even ulceration has been produced within the last named period. It is well settled, that inflammation is not invariably present, though death may have resulted from the effect of arsenic. Mr. Taylor says: "Medical evidence of poisoning from appearances after death, is, in such cases, entirely wanting; they are not very common, but still their occurrence proves, that unless great care be taken in forming an opinion, a case of arsenical poisoning may be easily overlooked. They teach this important fact in legal medicine, that the non-existence of striking changes in the alimentary canal after death, is no proof that the party has not died from the effects of arsenic. When the dose of arsenic is small, well-marked changes in the body are rarely met with."

Elimination of Arsenic.—Experiments upon animals show that arsenic is not only rapidly taken from the stomach into the system by absorption, but that it is equally rapidly eliminated and thrown off from the body, and from analogy, it follows that the same process goes on in the human subject. Actual observation in the human subject sustains this position. In this case, as in others, when an injurious agent finds its way into the system, there is an effort of nature to relieve itself by completely driving out the enemy. Orfila thinks that arsenic does not remain in the living body over twelve or fifteen days at the longest, and that, very often it is removed in much less time. This elimination goes on through the kidneys, skin, and intestinal canal.

Arsenic has been found in the liver and other organs, in fatal cases, in four hours by Taylor, and in ten hours by Chevallier, after being taken. Notwithstanding the kidneys are the main

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[1] Taylor on Poisons, 336.

channel through which the elimination takes place. Arsenic may exist, in the system to a fatal extent, as in the case of the Duke de Praslin, and yet not show itself in the bile or liver.

Arsenic may be eliminated from all parts of the system, and yet remain in certain organs, as the liver. After death, arsenic does not penetrate the liver by imbibition from the stomach. The liver does not eliminate through the stomach. Mr. Taylor says: "In the case of Reg. *v.* Hunter, a medical witness was asked how long a period was required for the entire removal of arsenic (by absorption) from the body. There was reason to believe that the deceased had died from the effects of arsenic; but a difficulty in the case was, that although he had died within the short period of *three days* after the dose of arsenic could have been administered to him by the accused; and although the symptoms and the appearances in the body were such as might have been caused by arsenic, not a trace of that poison could be found in the stomach or bowels, or in their contents. The question, therefore, was, if this man had really died from arsenic, could every particle of the poison have been carried out of his body within the period of three days? The analysis of the tissues was not so well understood then as it is now; but had these been examined, some absorbed arsenic might have been found, and the question thus practically solved. The medical witnesses answered the question by saying, that they thought the whole of the arsenic taken by deceased might have been removed from the body in *three days*, partly by vomiting, partly by purging, and partly by absorption, the poison being carried off by the urine and cutaneous exhalation. The answer was correct so far as it applied to their chemical examination; because they sought for the poison only in a free state in the contents of the stomach and bowels; and violent vomiting and purging might thus have got rid of a single dose taken three days previously; but it could not be applied to arsenic deposited in the liver and other organs."

CHAPTER XXXIV.

TAYLOR'S ANALYSIS OF ARSENIC.

A MOST important subject connected with the Medical Evidence of arsenical poisoning, and the point upon which most cases turn, is the analysis of the mineral, or the chemical process by which it is detected.

That this process may be well understood, at least by the medical witness and the attorney, we here give Mr. Taylor's Analysis, as found in the late edition of his valuable work on poisons. It is the fullest and most reliable exhibit of the chemical experiments upon which the life of the alleged criminal, and the safety of society, often depend.

TAYLOR'S CHEMICAL ANALYSIS.

Arsenic as a solid.—In the *simple state,* white arsenic may be identified by the following properties: 1. A small quantity of the powder, placed on platina-foil, is entirely volatilized at a gentle heat (380°) in a white vapor. Should there be any residue it is impurity. If a small portion of the white powder be gently heated in a glass tube of narrow bore, it will be sublimed, and form a ring of minute octahedral crystals, remarkable for their lustre and brilliancy. Under a microscope of high magnifying power (250 diameters) the appearance of these crystals is remarkably beautiful and characteristic; one not exceeding the 4000th of an inch in size may be easily recognized by the aid of this instrument. The form is that of the regular octahedron, of which the sides are equal. The crystals are frequently grouped, or nucleated; the solid angles are sometimes cut off,

and occasionally equilateral triangular plates are seen. The forms are various; but all are traceable to the octahedron. Crystals which do not exceed the 10,000th, or even the 16,000th of an inch in diameter, present these microscopical characters distinctly; and the 1000th part of a grain of white arsenic will furnish many hundreds of crystals visible under the microscope. Generally speaking, the smallest crystals are those in which the octahedral form is the best defined. 2. If a portion of the powder be introduced on a fine platina wire into the edge of the flame of a spirit-lamp, it will impart a steel-blue color, and evolve a white vapor. It will be observed, in these experiments, that white arsenic in vapor possesses no odor. 3. On boiling a small quantity of the powder in distilled water, it is not dissolved; but it partly floats in a sort of white film, and is partly aggregated in small white masses, at the bottom of the vessel. It requires long boiling, in order that it should become dissolved and equally diffused through water. This was a point of some importance in the case of Reg. *v.* Lever. A question here arose, whether arsenic would float on tea. I have observed that the film formed on putting powdered arsenic into a vessel of cold water, remained for five weeks on the surface, notwithstanding the occasional agitation of the vessel. 4. On adding a few drops of a solution of potash to the mixture of arsenic and water, and applying heat, the poison is entirely dissolved, forming a clear solution of arsenite of potash. 5. The powder is soluble by heat in hydrocholoric acid, and when a piece of bright copper is immersed in the solution, it acquires a dark iron-gray stain from the deposit of metallic arsenic. 6. When the powder is treated with a solution of hydrosulphuret of ammonia in a watch-glass, there is no immediate change of color as there is with most metallic poisons. On heating the mixture, the white powder is dissolved; and on continuing the heat until the ammonia is expelled, a rich yellow or orange-red film is left (sulphuret of arsenic), which is soluble in all alkalies, and insoluble in hydrochloric acid. This yellow compound is produced from the mixture by spontaneous evaporation.

A solution of sulphuretted hydrogen colors it slowly, and leaves, by evaporation, the same yellow compound. 7. It is oxidized and dissolved when heated in strong nitric acid; and on evaporation to dryness on a sand-bath, it leaves a white deliquescent residue (arsenic acid), which, when dissolved in a few drops of water, produces a brick-red colored precipitate with a solution of nitrate of silver. 8. When the powder is heated in a tube with two or three parts of charcoal, or of a carbonaceous flux, it yields an iron-gray sublimate of metallic arsenic, which has an odor of garlic as it is evolved in vapor. This is called the "reduction test or process."

Reduction process.—The best reducing agent is soda-flux, obtained by incinerating neutral acetate or tartrate of soda, in a covered platina crucible. When the quantity of arsenic is from one-fourth to one-twentieth part of a grain, the tube employed for this experiment may be three inches long, and from one-eighth to one-sixth of an inch in diameter. When the arsenic is in still smaller proportion, a tube of smaller diameter should be used; or, as recommended by Berzelius, the closed end of the tube may be drawn out into a bulb with a narrow neck. The sublimate of metallic arsenic is then concentrated in the slender neck, instead of being diffused over a large surface of glass. Heat should be gradually applied, first to the glass above the mixture, and then to the mixture itself. As the alkali in the flux retains some arsenic, it has been suggested that a slip of charcoal should be employed in place of soda-flux when the quantity of arsenic is very small. I have, however, never found it necessary to resort to the use of charcoal. The reduction process with the soda-flux will be found sufficient for any quantity of arsenic that is visible to the eye.

During the application of heat to the mixture in the tube, there is a perceptible odor resembling that of garlic, which is possessed by metallic arsenic only while passing from the state of vapor to arsenious acid. This *odor* was at one time looked upon as peculiar to arsenic, but no reliance is now placed on it as

a matter of Medical Evidence,—it is a mere accessory result. Many mistakes were formerly made respecting it. Thus, we find it stated to have been perceived under circumstances in which it could not have been produced! It was not then known that white arsenic (arsenious acid) possessed no odor in the state of vapor.

In this experiment of reduction, there are commonly two sublimates or rings deposited in the tube; the upper ring has a brown color, and appears to be a mixture of finely divided metallic arsenic and arsenious acid, or, according to some chemists, a sub-oxide, more volatile than the metal. The lower ring is smaller, well defined, and of an iron or steel-gray lustre. This is pure metallic arsenic. In order to determine the *weight of the sublimate*, the glass tube should be filed off closely on each side of the metallic rings, and weighed; the sublimate may then be driven off by heat, and the piece of glass again weighed; the difference or loss represents the weight of the sublimate. These sublimates are remarkably light, and require to be weighed in a delicate balance. I found, in one experiment, a large sublimate to weigh no more than ·08 grains. By heating gently the piece of tube, reduced to powder in an agate-mortar, in another tube of larger diameter, the metallic arsenic, during volatilization, forms octahedral crystals of arsenious acid, which, after examination by the miscroscope, may be either dissolved in a few drops of water, and tested by the liquid tests, or submitted to the process mentioned heretofore. This process is as satisfactory as the application of the liquid tests, and it has the advantage of not leading to the subdivision and dilution of a small quantity of arsenic. One of the *metallic* rings should be also submitted to the action of nitric acid,—converted to arsenic acid, and tested by nitrate of silver. Dr. Christison states, that by the reduction process a distinct metallic sublimate may be obtained from the 300th part of a grain of arsenic. These sublimates may be preserved unchanged for years by filing off the ends of the tube, and then hermetically sealing them in the flame of a spirit-lamp.

Objections to the reduction process.—The demonstration of the presence of arsenic is complete when all the results I have described are obtained. The other tests are useful, as indicating the properties of arsenic, but they are not necessary when metallic sublimates, convertible to octahedral crystals by heat, and to arsenic acid by the action of nitric acid, have been procured. With such evidence of the chemical nature of the sublimates as that above described, there are no reasonable objections to the reduction process. Cadmium, selenium, and mercury produce sublimates, but these do not possess the appearance or properties of the arsenical sublimate. Fixed stains in the glass tube from the presence of lead, or from adhering charcoal, can not be mistaken for a volatile metallic deposit. Arsenic is sometimes used in the manufacture of glass, but the whole is volatilized during the process. It is contained as an ingredient in some kinds of opal glass; but this is not used for chemical purposes. The process of reduction, therefore, with the simple precautions above mentioned respecting the properties of the sublimate, is conclusive of the nature of the substance under examination.

Arsenic in solution in water: Liquid tests.—The aqueous solution of arsenic is clear, colorless, possesses scarcely any perceptible taste, and has a very faint acid reaction. In this state, we should first evaporate slowly a few drops on a glass plate, when a crystalline crust will be obtained. On examining this crust by a microscope, it will be found to consist of numerous minute octahedral crystals, presenting equilateral triangular surfaces by reflected light. By this simple experiment, arsenic is distinguished from every other metallic poison. 1. On adding to the solution, *Ammonio-nitrate of silver*, a rich yellow precipitate of arsenite of silver falls down: rapidly changing in color to an olive brown. This test is made by adding to a very strong solution of nitrate of silver, a weak solution of ammonia, and continuing to add the latter, until the brown oxide of silver, at first thrown down, is almost redissolved. The yellow precipitate is soluble in nitric, tartaric, citric, and acetic acids, as well

as in a solution of ammonia. It is not dissolved by potash or soda. 2. On adding to the solution of arsenic, *Ammonio-sulphate of copper*, a rich green precipitate is formed (Scheele's green), the tint of which varies, according to the proportion of arsenic present and the quantity of the test added; hence, if the quantity of arsenic be small, no green precipitate at first appears: the liquid simply acquires a blue color from the test. In less than an hour, if arsenic be present, a bright green deposit is formed, which may be easily separated from the blue liquid by filtration, or decantation. This test is made by adding ammonia to a weak solution of sulphate of copper, until the bluish-white precipitate, at first produced, is nearly redissolved: it should not be used in large quantity if concentrated, as it possesses a deep violet-blue color, which obscures the green color of the precipitate formed. The precipitated arsenite of copper is soluble in all acids, mineral and vegetable, and in ammonia, but not in potash or soda. When collected and dried, it possesses this characteristic property: by very slowly heating a few grains in a tube of small bore, arsenious acid is sublimed in a ring of minute resplendent octahedral crystals, visible to the eye, or by the aid of a lens or microscope. *Objections.*—The tests above described are called the liquid tests for arsenic. The *Silver* test, first discovered by Mr. Hume, in 1789, acts with remarkable delicacy, and is of use as a corroborative test in the various processes for determining the presence of this poison in the body. A solution of an *alkaline phosphate*, which yields a yellow precipitate with nitrate of silver, is not affected by the ammonio-nitrate when properly made; and conversely, a solution of arsenious acid gives only a faint turbidness with nitrate of silver, while it is copiously precipitated of a yellow color by the ammonio-nitrate. A diluted solution of *phosphoric acid* may be, in some cases, precipitated by this test, exactly like a solution of arsenic; but there is one general answer to these objections. We do not rely upon the application of *one* test, but of several; and the fallacies attending one are removed by the employment of others. With respect to the delicate

reaction of the silver-test, Mr. Marshall states, that it is fully capable of detecting the 1000th part of a grain in solution,—a proof that its application was well understood more than a quarter of a century ago. Dr. Traill asserts that the 16,000th part of a grain of arsenic in solution is precipitated by the silver-test, and with the 10,000 part of a grain a precipitate is visible to the eye. I have found the 8000th part of a grain dissolved in one drop of water, gave a pale-yellow film; but the result materially depended on the quantity of water present. Thus the 4000th part of a grain of arsenic, in ten drops of water, was not perceptibly affected by the test; but the 2000th of a grain, dissolved in four drops of water, gave a decidedly yellow precipitate. The evidence derivable from these minute reactions would not be of much value, except that the test is used to corroborate inferences from the results of other experiments. The *Copper* test is far less delicate in its reaction, and having an intensely blue color, it entirely conceals the green tint which may be given by a small quantity of precipitated arsenite of copper; but, in spite of this, if arsenic is present, the green precipitate is, after some hours, deposited at the bottom of the vessel. In cautiously adding a solution of arsenic of known strength to a few drops of this test, no green tint was imparted, until the quantity of arsenic amounted to the 173d part of a grain in less than one fluid-drachm of water—the degree of dilution being about 8640 times. Whenever the arsenic is in small quantity in its aqueous solution, this should be concentrated to the smallest possible bulk, and not more than one or two drops of the ammonio-sulphate should be added by means of a glass rod.

No one, in the present day, would think of employing these liquid tests in solutions, in which arsenic was mixed with *organic matter*. Almost all liquids used as articles of food, are precipitated or colored by one or both of them, somewhat like a solution of arsenic, although none of this poison is present. Thus, then, any evidence founded on the production of *color*, unless the arsenic is dissolved in pure water, or unless the precipitates

be proved to contain arsenic, should be rejected. These liquid tests are now employed rather as adjuncts to other processes, than as a direct means of detecting the poison. An exclusive reliance upon them, as *color tests*, has led to the rejection of chemical evidence on several trials, where they had been most improperly employed in the analysis of suspected liquids containing organic matter. The trial of Donnall at Launceston, in 1817, affords a memorable lesson to the medical jurist on this subject.

3. *Sulphuretted hydrogen gas. Sulphur* or *Gaseous test.*—The hydrosulphuret of ammonia gives no precipitate in a solution of arsenic until an acid has been added, whereby arsenic is known from most metallic poisons. On adding an acid (acetic or pure diluted hydrochloric) a rich golden yellow-colored precipitate is thrown down (orpiment or sesquisulphuret of arsenic). It is better, however, to employ in Medico-legal analysis, a current of sulphuretted hydrogen gas, which is easily procured by adding sulphuret of iron to one part of strong sulphuric acid and three parts of water in a proper apparatus. The arsenical liquid should be slightly acidulated with acetic or very diluted muriatic acid, before the gas is passed into it: at least care should be taken that it is not alkaline. The yellow compound is immediately produced and dissolved if arsenic is present in small quantity: but it may be collected after boiling the liquid so as to drive off the surplus gas. This yellow precipitate is known to be sulphuret of arsenic by the following properties: 1. It is insoluble in water, alcohol, and ether, as well as in all acids, mineral (muriatic) and vegetable; but it is decomposed by strong nitric and nitro-muriatic acids, leaving on evaporation at a low temperature arsenic acid, which may be neutralized by ammonia and tested by nitrate of silver. A brick-red precipitate, will indicate that the yellow compound was sulphuret of arsenic, or orpiment. If strong nitric acid alone be used there will be no risk of losing any portion of the arsenic. 2. It is immediately dissolved by caustic potash, soda, or ammonia, forming, if no organic matter be present, a colorless solution. 3. When dried and strongly heated, with a

mixture of three parts of well-dried carbonate of soda and one part of cyanide of potassium, it furnishes a sublimate of metallic arsenic. This sublimate may then be tested by the processes already described. 4. The precipitated sulphuret may be deflagrated in a porcelain capsule with a mixture of pure nitrate and bicarbonate of potash. The saline residue, acidulated with nitric acid, should be evaporated, and the arseniate of potash dissolved out by a small quantity of water. The nitrate of silver may then be added to this solution, when the brick-red arsenite of silver will be produced. Unless these properties are proved to exist in the yellow precipitate formed by sulphuretted hydrogen in an unknown liquid, it can not be safely regarded as a compound of arsenic. On the other hand, when they are possessed by the precipitate, it must be arsenic, and can be no other substance. The sulphur test is extremely delicate in its reaction. It begins to give a yellow tinge when the liquid contains only the 4000th part of a grain of arsenious acid in ten drops of water; the arsenic therefore forming about the 40,000th part of the solution. This becomes more decided with the 2000th part of a grain, and still more with the 250th part of a grain: the sulphuret is not, however, actually precipitated until diluted hydrochloric acid, in which it is insoluble, has been added to the liquid. It is important to observe that the effect produced by this test will materially depend on the quantity of water in which the given weight of arsenic happens to be diffused. In one experiment the gas was passed into a solution containing the 400th part of a grain in twenty drops of water: the results were clear and decided; the liquid acquired a rich golden-yellow color, but when passed into a solution containing the same weight of arsenic in half an ounce of water, a yellow tint was scarcely perceptible. The arsenic in the first case was in the proportion of the 8000th, and in the second of only the 1,000,000th part of the solution. Dilution therefore seriously affects the chemical results. *Objections.*— Many objections have been taken on criminal trials to the Medical Evidence, founded on the application of this test; but it may

be at once stated that there is no objection to the inference derivable from the sulphur test, provided the properties of the precipitate, under 1, 2, 3, or 4, have been determined. The objections apply only to those cases in which arsenic is said to be present, when a yellow precipitate is produced by sulphuretted hydrogen. 1. *Cadmium.* It is remarkable that this metal should furnish, at the same time, a plausible ground of objection, both to the process by reduction from the solid state, and to the gaseous test applied to a solution of the poison. Thus the soluble salts of cadmium yield, with sulphuretted hydrogen, a rich yellow precipitate resembling closely that produced by arsenic, and this also gives a metallic sublimate when heated with soda-flux. There are, however, these striking differences: the yellow compound of arsenic is soluble in ammonia, that of cadmium is insoluble,—the compound of arsenic is insoluble in strong hydrochloric acid, that of cadmium is perfectly soluble. Of the dried precipitates, the sulphuret of arsenic is not perceptibly affected in the cold by strong hydrochloric acid, that of cadmium is dissolved readily in the cold with the evolution of sulphuretted hydrogen gas; and a colorless salt of cadmium (chloride) is thereby formed, precipitable as a white carbonate by alkaline carbonates. A solution of a salt of cadmium is immediately precipitated, of a rich yellow color, by hydrosulphuret of ammonia,—that of arsenic is *not* precipitated by this agent. There are many other differences: thus cadmium, when boiled with diluted muriatic acid, is not precipitated on copper under the same circumstances as arsenic, and it does not combine with hydrogen to form a combustible gas. An objection, on the ground of the strong similarity of cadmium to arsenic, was unsuccessfully taken to the chemical evidence given on the trial of Mrs. Burdock at Bristol, in 1835. 2. *Tin.* A persalt of tin is precipitated of a dusky yellow color by the gas; but the precipitate is destitute of all the properties of sulphuret of arsenic: it is insoluble in ammonia, and it gives no metallic sublimate when heated with flux. A solution of tin is also known from one of arsenic, by its being instantly precipitated

by the hydrosulphuret of ammonia. 3. *Antimony.* A solution of this metal is precipitated of a rich orange-red (not yellow) color by the gas,—the precipitate yields no metallic sublimate with flux, and the solution of antimony is also precipitated by hydrosulphuret of ammonia. If sulphuret of antimony should be mixed with sulphuret of arsenic, the antimony is retained and the metallic arsenic alone volatilized by the process under Exp. 3. 4. *Uranium.* A solution of a persalt of uranium gives, with a current of sulphuretted hydrogen gas, a yellow-brown precipitate, wholly unlike that caused by arsenic. This precipitate differs from that of sulphuret of arsenic, in being insoluble in ammonia, soluble in hydrochloric acid, and in yielding no metallic sublimate with soda-flux. Besides, a solution of uranium salt is precipitated by hydrosulphuret of ammonia.

MARSH'S PROCESS. HYDROGEN TEST.—This process for the detection of arsenic was first proposed by Mr. Marsh, at Woolwich, in the year 1836. It is based on the decomposition of arsenious acid and the soluble compounds of arsenic, by hydrogen evolved in the nascent state from the action of diluted sulphuric or hydrochloric acid on zinc. The apparatus is of the most simple kind, and is so well known, as to need no description. It has undergone various modifications, and has received the names of various supposed inventors or improvers, but the principle is the same, and the sole merit of the invention must be assigned to Mr. Marsh. The arsenic may be introduced into the short leg of the tube in the state of powder; but it is better to dissolve it in water, by boiling, either with or without the addition of a few drops of a solution of potash. The metallic arsenic combines with a portion of the hydrogen, forming *arsenuretted hydrogen gas*, which possesses the following properties: 1. It has an offensive odor, somewhat similar to that of garlic. 2. It immediately blackens a solution of nitrate of silver. This may be proved by holding a piece of filtering paper, wetted with a solution of nitrate of silver, in the current of gas as it escapes from the jet. The silver is reduced, and presents a black metallic appearance.

If the gas is passed into a tube containing a weak neutral solution of nitrate of silver, a black precipitate of reduced silver is formed, and the liquid, on evaporation, yields arsenic acid or red arsenite of silver. 3. It burns with a pale bluish-white flame, and evolves, during combustion, a white smoke (arsenious acid). 4. A cold plate of glass or white porcelain, held in the flame near the point, receives a dark stain from the deposit of arsenic upon it. This stain is composed in the centre of pure metallic arsenic, which may be sometimes raised up in a distinctly bright leaf of metal,—immediately on the outside of this, is an opaque black ring (suboxide of arsenic?), which, when viewed by transmitted light, is of a clear hair-brown color at the extreme edge: if the quantity of arsenic be very small, the metallic lustre and opacity may be wanting, and the deposit will be merely a film of a brown color by transmitted light. On the outside of this black ring is a thin wide film, of a milk-white appearance, which is nothing more than arsenious acid reproduced by the combustion of the gas. 5. A white saucer, or a slip of card or paper moistened with ammonio-nitrate of silver, held about an inch above the point of the flame, will be found, if arsenic be present, to be colored yellow, from the reproduced arsenious acid being absorbed, and forming yellow arsenite of silver, easily soluble in ammonia. If a current of the gas be conducted through a tube of hard German glass, and a spirit-lamp applied to the tube during the passage of the current, metallic arsenic of a steel-gray color will be deposited on the glass at a short distance from the flame. This may be removed, and tested by nitric acid.

This process is probably the most delicate of all those which have been devised for the detection of arsenic; but for this reason it requires the greatest caution in its application. Its delicacy has been sometimes improperly estimated by the assumed weight of the metallic deposit on glass; whereas it is certain that the quantity of arsenic in one infinitesimal deposit, if transferred to the apparatus, would give no indication whatever of the presence of arsenic. In operating on the poison it must be remembered

that, by this process, we are dividing and subdividing the metal into a series of deposits, the weight of some of which might not be equal to the millionth part of the weight of the arsenic which is actually furnishing them. More or less arsenic is always lost during the combustion of the gas; and most of the apparatuses are so constructed, that they allow of the escape of this poisonous gas; a fact which may be demonstrated by placing a solution of nitrate of silver on filtering paper over the open end of the tube. *Objections.*—Other substances will combine with nascent hydrogen, and when the gas is burnt, a deposit will be formed on glass or porcelain, which may be mistaken for arsenic. A liquid containing antimony, selenium, phosphorus, sulphur, or even some kinds of organic matter, may produce a compound with hydrogen, which, when burnt, will leave a dark deposit or stain on glass. The only objection of any practical force is that founded on the presence of *antimony*, which, as a result of medicinal use, may be present in the liquids as well as in the tissues of a dead body. A current of antimonuretted hydrogen gas reduces silver from a solution of the nitrate, but it has not the odor of arsenuretted hydrogen. It burns with a very pale lemon-yellow flame, and forms a white smoke (oxide of antimony). When a solution of ammonio-nitrate of silver, in a saucer, is exposed to this white vapor, there is a black stain, in place of the yellow deposit produced by arsenic. The differences between the arsenical and antimonial deposits obtained by the process of Marsh are, however, well marked. The antimonial deposit has rarely a bright metallic lustre, except when seen on the reverse side of the glass. By transmitted light, the deposit is of smoky-black color, while that of arsenic is hair-brown. Numerous suggestions have been made for distinguishing a deposit of arsenic from that of antimony. The plan which I find to be best adapted for this purpose has been already described in reference to arsenious acid and reduced arsenic. Receive the deposit from the burning gas on the interior of a small white porcelain capsule. Add a few drops of strong nitric acid. The deposit will

be immediately dissolved. Evaporate gently to dryness. Moisten the dry residue with one or two drops of water, and then add a few drops of a *strong* solution of nitrate of silver. If the stain was owing to arsenic wholly, or in part, a brick-red colored precipitate will immediately appear. This will be more or less distinct, according to the quantity of arsenic present. The precipitate (if owing to arsenic) is entirely soluble in ammonia. A deposit of antimony thus treated, leaves a white residue (oxide of antimony), insoluble in water. Nitrate of silver added to it produces no colored precipitate; but if a little ammonia be brought near, either in vapor or liquid, and a solution of potash is added, a precipitate is formed, which becomes black by standing. Hydrosulphuret of ammonia dissolves the antimonial deposit immediately, and on evaporation leaves an orange-reddish colored film of sulphuret of antimony, soluble in hydrochloric acid, and insoluble in ammonia. The hydrosulphuret does not readily dissolve the arsenical deposit, but when gently evaporated, it leaves a bright-yellow film (sulphuret of arsenic), not soluble in hydrochloric acid, but soluble in ammonia. Imponderable quantities of the two metals may be thus easily identified. In testing these minute films for arsenic, hydrochloric acid must not be used with the nitric, since, on evaporation, a portion, or the whole of the arsenic may be volatilized, and lost as chloride of arsenic.

It will be observed, in the production of antimonuretted hydrogen, that antimony is rapidly deposited in the form of a fine black precipitate in the tube. This arises from the chemical action of the zinc. The antimonuretted hydrogen can not be kept long, as the antimony is speedily separated from it. Arseniuretted hydrogen may be kept for use for a much longer period, but, sooner or later, some arsenic is deposited on the zinc, as well as on the metallic parts of the apparatus. Stopcocks are thus coated with a film of arsenic; hence fresh zinc and a clean stopcock should be used on each occasion, or the arsenic of a former operation might be erroneously referred to a substance under examination. The operator must not only look to the state of

the apparatus, but he should also satisfy himself of the absolute purity of his materials.

The zinc, sulphuric, and hydrochloric acids, which are employed in Marsh's process, are often contaminated with arsenic. Dr. Clark, of Aberdeen, informed me, some years since, that he had not discovered a specimen of zinc free from arsenic, when about an ounce of the metal was used in an experiment, and the hydrogen gas evolved was tested by a solution of nitrate of silver: but pure distilled zinc may now be procured from respectable druggists. The sulphuric acid of commerce sometimes contains a large quantity of arsenic. The late Mr. Scanlan found that 2000 grains of one specimen of acid yielded 1·5 grains of sesquisulphuret of arsenic. From the great demand for a cheap and impure sulphuric acid for agricultural purposes, it is now the exception to the rule to find this acid free from arsenic. Hydrogen procured by this acid is often contaminated with arsenic to a dangerous extent. An impure sample of acid led to the death of an Irish chemist, who breathed hydrogen thus produced, and who had neglected to test the acid before use. The impurity of this acid leads to the contamination of hydrochloric or muriatic acid with arsenic, for the cheap arsenical acid is now largely employed in this manufacture. The best answer to all objections based on the presence of arsenic from accidental sources is, that the materials were tried repeatedly before the suspected liquid was introduced into the apparatus. If no sublimate or deposit be formed until *after* the introduction of the suspected liquid, it is evident that the arsenic must have been in the liquid introduced; a fact which may be considered as clearly established, if, on removing the liquid and washing out the tube, no deposits whatever result from employing the portions of the same acid and zinc.

These are, I believe, the only tangible objections to the use of Marsh's test, and they are not difficult of removal, when ordinary care is taken. It will be apparent, that not one of these objections could apply, except to those cases where Marsh's test

is relied on as the *sole* and exclusive chemical proof of the presence of arsenic; but in most instances, when this process is *safely* applicable, other tests are also applicable; and it does not at all diminish the merit of this most useful and ingenious invention, to say that the results which it furnishes should be corroborated by the use of some of the other tests, if it were only for the sake of preventing any plausible objections to the inference derivable from its employment. The great object of chemical evidence is not to show a court of law what may be done by the use of *one* test only, by peculiar manipulations on imponderable traces, but to render the proof of the presence of poison in the substance examined most clear and convincing. If, in any case, we have no other evidence to offer than that furnished by Marsh's process,—a case in which the quantity of poison must be infinitesimal, and the metallic deposites proportionally minute,—it would be better to abandon the evidence altogether, than to maintain that poison is present from results which admit of no sort of corroboration; for all who have experimented on the subject, must have perceived the utter inefficacy of applying liquid tests to determine the chemical properties of imponderable and scarcely visible sublimates. This appears to me to have been the most objectionable part of the evidence in the well-known case of Madame Laffarge. Orfila admitted that he had obtained only a few deposits, so slight that they could not be weighed. He estimated the united weight at half a milligramme (·0077 gr.), or about the one hundred and thirtieth part of a grain.

When reliance is placed on the blackening of a solution of nitrate of silver as evidence of the presence of arsenic, it must be remembered that sulphuretted hydrogen will produce the same effect, and that sulphur is often contained in zinc. The gas should either be first passed through a solution of a salt of lead,—or so entirely decomposed by heat, that metallic arsenic is obtained in the tube through which the current part is passing.

Delicacy of Marsh's process.—Marsh's process is undoubtedly one of great delicacy. MM. Danger and Flandin assert that

metallic deposits may be procured when the arsenic forms only the 2,000,000th part of the liquid examined. M. Signoret states that he has procured metallic deposits with only the 200,000,000th part of arsenic in the liquid: this is in the proportion of one grain of arsenic dissolved in about 400,000 ounces, or 3000 gallons of water! As the delicacy of this test has been already made a subject of discussion in a court of law (The Queen against Hunter, Liverpool Spring Assizes, 1843), it may be proper to offer a few remarks respecting it. It was stated at that trial, that the one-millionth part of a grain of arsenic might be rendered visible by Marsh's test; and the judge, guided by this statement, put the question to another medical witness, whether arsenic could be so removed from the stomach in three days, as that it would be impossible to discover the *one-millionth part of a grain in the body.* It appears to me that the facts relative to the delicacy of tests are not always stated with sufficient clearness on these occasions. Thus we have to consider two points: 1. The total quantity of poison experimented on; and 2. the degree of dilution, or the total quantity of liquid in which the poison is dissolved or suspended. There is no doubt that considerably less than the millionth part of a grain of arsenic may, by Marsh's test, be rendered *visible* on a glass plate: it is possible to distinguish with the eye a piece of leaf-gold which would weigh less than the ten-millionth part of a grain; but the practical question is, whether this test will enable us to discover arsenic in a single drop of a solution, made by dissolving one grain of the poison in a million grains or sixteen gallons of water! If not, the statement amounts to nothing; for it is clear that if more than one drop of such an extremely diluted solution be taken, the test is acting upon a larger quantity of arsenic than the above form of expression would indicate. I have generally found that the fractional quantity stated to be detected, referred rather to the degree of *dilution* than to the *absolute quantity of poison* present: whereas a test may fail to act, as it has been already stated, either from the smallness of the quantity of poison

present, or from the large quantity of water in which it is diffused. The results of my own experiments are, that when arsenic is mixed with the acid liquid in a tube capable of holding two fluid-ounces, very faint and scarcely perceptible deposits begin to be formed on a glass plate, with a quantity equal to the 2160th part of a grain: the diffusion here being equal to two million times the weight of the poison. With the 1080th part of a grain in the same quantity of water (the arsenic forming therefore one-millionth part), slight brown annular stains were procured. The annular form is probably due to the central portion of the minute film being volatilized by the heat of the point of the flame: unless the glass is speedily removed, the whole of the deposits may vanish. With the 720th of a grain, the arsenic being in the proportion of about the 800,000th part of the liquid, the stains were much more decided, but quite imponderable. With the 100th grain in one fluid-ounce of water (the 48,000th part), and the 67th grain in two fluid-ounces (the 64,800th part), the deposits on glass were decided and characteristic; and it is at this point that the process begins to be safely available for the purposes of legal medicine. M. Villain has attempted to determine how many metallic deposits can be obtained from a given weight of arsenious acid. The result at which he arrived is, that 1-65th part of a grain of white arsenic will yield on an average 226 metallic deposits of an average diameter of the 1-12th of an inch. The average weight of each, therefore, even supposing there were no loss, would be about the 1-15,000th part of a grain.

Reinsch's process.—Hugo Reinsch first published an account of this process, which originated in an accidental discovery of arsenic in muriatic acid, in 1843. Soon after the announcement, I examined the application of the process to the purposes of Medical Jurisprudence, and a full account of the results was published in the British and Foreign Medical Review. for July, 1843, p. 275. It has since been extensively employed in this countrary in Medico-legal practice. While it is open to fewer

objections than the process of Marsh, it is preferable in its simplicity, and in the facility of its application. It enables the analyst to trace arsenic to a minute degree in all its combinations, if we except arsenic acid and the arseniates; and in reference to these compounds, it is inferior in delicacy to the process of Marsh. One substance only is required of which the purity must be guaranteed, namely, the muriatic or hydrochloric acid. Metallic copper, either in the form of freshly polished foil or wire, is used for the separation of the metal. The material best adapted for this process is the finest copper-wire woven into a gauze containing from twelve to sixteen thousand apertures to the square inch. A small piece of this, by reason of the extensive surface presented, will enable the analyst to collect a comparatively larger proportion of arsenic than would be deposited on the foil. The arsenic adheres to it with greater firmness, and the gauze will indicate by a change of color the presence of the poison, when the appearance on the foil would be indistinct.

The liquid suspected to contain arsenic is mixed with from one-sixth to one-eighth part of its volume of muriatic acid (free from arsenic), and brought to the boiling-point. A solid is simply boiled in distilled water containing about the same proportion of acid. When brought to the boiling-point, about half a square inch of copper gauze is introduced, and if arsenic is present, even in a small quantity, this is indicated by the copper acquiring an iron-gray color. The gauze is removed, washed in water to free it from any trace of acid,—dried on blotting paper and in a warm current of air, rolled into a small cylinder and placed in a dry and warm reduction-tube. Heat is now gradually applied to the cylinder of coated copper, and the metallic arsenic, in subliming, is deposited in a cool part of the tube in the form of a ring of brilliant octahedral crystals of white arsenic. These may be identified by the microscope, and then tested in the manner described. When the quantity of arsenic is small, the polished copper merely acquires a faint greenish-blue or bluish tint, and the time required for the deposit is materially affected by the

quantity of water present, or in other words, the degree of dilution. But one great advantage is, that we are not obliged to dilute the liquid in the experiment, and there is no material loss of arsenic after the copper is introduced, as in Marsh's process; the whole may be removed and collected by the introduction of successive portions of the metal. This process is extremely delicate, the results are very speedily obtained, and are highly satisfactory. Among the cautions to be observed are these: 1. Not to employ too large a surface of copper in the first instance; and 2. Not to remove the copper from the liquid too soon. When the arsenic is in small quantity, and the liquid is much diluted, the deposit does not take place sometimes for half an hour. If the copper is boiled in the liquid for an hour or longer, it may acquire a dingy tarnish, in the absence of arsenic, from the action of the acid only (oxychloride of copper). This is known by its yielding no crystalline sublimate when heated, its want of metallic lustre, as well as by its being easily removed by friction.

Objections.—Certain objections have been urged to this process. 1. Arsenic may be present in the muriatic acid: this is at once answered by boiling the copper in a mixture of the muriatic acid and water before adding the suspected liquid. This should always be a preliminary experiment. In the case of Mrs. Woolei, some doubt was thrown on the scientific evidence by reason of the use of arsenical muriatic acid. The discovery of the impurity was not made, until after the analysis was completed. 2. Another objection is, that other metals are liable to be deposited on copper under similar circumstances. This is the case with *antimony*, whether in the state of chloride, or of tartar emetic; and it is not always easy to distinguish by the appearance the antimonial from the arsenical deposit. Should the quantity of antimony be small, the deposit is of a violet tint: if large, of an iron-gray color, resembling arsenic. In this case, a portion of the solution may be greatly diluted, when the peculiar violet-red color of the antimonial deposit will be made apparent. There is one answer to these objections, namely, that from an *arsenical* deposit,

octahedral crystals of arsenious acid may be procured by *slowly* heating the copper, and the crystals may be proved by other tests to be those of white arsenic. Such a corroboration is necessary, because the crystalline form of arsenious acid is not always distinguishable by the eye; and the antimonial deposit gives a white amorphous sublimate, which, however, is quite insoluble in water. Care must be taken not to mistake minute spherules of water, mercury, or muriatic acid for detached crystals of arsenious acid; and here the microscope will be found of great service. The facility of applying Reinsch's process renders it necessary that the experimentalist should be guarded by his inferences. It is not merely by the production of a deposit on copper that he judges of the presence of arsenic: but by the conversion of this deposit to arsenious acid, demonstrable by its crystalline form and its chemical properties. If a deposit take place on copper, and arsenious acid can not be obtained by heating it, then the evidence of its having been caused by arsenic is insufficient. Owing to the neglect of these corroborative results, antimony and other substances have been occasionally mistaken for arsenic. Bismuth, silver, mercury, gold, and platina, are deposited on copper from diluted solutions under similar circumstances: the four last-mentioned metals being rapidly deposited in a *cold* acidulated solution. The deposits of the three first metals have a silvery white appearance, quite unlike that of arsenic, and the only volatile metal among them is mercury, which is sublimed in the form of bright metallic globules, visible to the naked eye, or by the aid of a lens or microscope. Gold produces a yellowish or bronze-colored deposit. Platina produces a deposit like arsenic, but it is fixed: no sublimate can be obtained from it. An alkaline sulphuret, or sulphuretted hydrogen, if present, as in a putrescent liquid, may give a tarnish to copper; but this is a fixed stain of sulphuret of copper. All objections are at once answered by the production of a crystalline sublimate, and the chemical proofs of its properties. The above facts show that a mere deposit or tarnish on copper can not be relied on as a proof of the presence of arsenic.

Delicacy of Reinsch's process.—This test failed to detect the 4000th part of a grain of arsenic in thirty drops of water, the dilution being equal to 120,000 times the weight of the arsenic. The deposit on copper commenced with a purplish-colored film, when the quantity of arsenious acid was equal to the 3000th part of a grain in thirty drops of water, or under a dilution of 90,000 times its weight. It was very decided with the 2000th part of a grain in the same quantity of water, but in neither of these cases could octahedral crystals of arsenious acid be obtained by heating the copper. The following experiments will show how this test is liable to be affected by dilution: The copper was coated in a few seconds, when boiled in a solution containing the 4000th part of a grain in ten drops of water, although the test had failed to detect the same weight of arsenic in three times that quantity of water. So, again, the 2160th part of a grain in thirty drops of water gave an arsenical deposit on copper; while the same quantity in half an ounce of water, did not produce any change of color in the metal. By concentrating a diluted solution with the copper immersed in it, we shall, sooner or later, secure a deposit of the arsenic and at the came time prevent it from escaping in vapor as chloride of arsenic. The deposit adheres with great firmness to the copper gauze. In examining one of these deposits after it had been loosely wrapped in paper for a period of nearly *fourteen years*, I found it of a brownish-black color and iridescent: the eighth of a square inch, when heated, still gave a well-marked ring of octahedral crystals of arsenious acid.

There can be no doubt that Marsh's process will enable an operator to detect a smaller quantity of arsenic than that of Reinsch; but when Reinsch's process fails to detect arsenic, it would be hardly safe to trust to the evidence furnished by the process of Marsh alone. Our law authorities have not yet been inclined to receive with favor chemical evidence when it is based on the fiftieth or the one hundred thousandth part of a grain, and the numerous mistakes respecting normal and cemetery arsenic,

which have owed their origin to too great a reliance on Marsh's process, are a justification of this distrust.

Arsenic in liquids containing organic matter.—Arsenious acid, when in a state of solution, is not liable to be precipitated by any animal or vegetable principles, although all such substances render it less soluble in water. The liquid for analysis should be filtered through muslin, cotton, or paper, in order to separate any insoluble matters. Should it be colored, this is of little moment, provided it be clear. If viscid, it should be diluted with water and boiled with a small quantity of muriatic acid; on standing, a deposit may take place, and this should be separated by a filter. A portion of the original liquid before boiling should always be filtered and tested for arsenic, in order to determine whether any of the poison is present in a state of solution.

As a trial-test, we may boil in a portion of the liquid, strongly acidulated with pure muriatic acid, a small piece of copper gauze fixed to the end of a fine and polished copper wire. In a few seconds, if arsenic be present, the copper will acquire a gray metallic coating. If, after half an hour, the copper remain unchanged, the arsenic, if present, must be in extremely minute proportion; if, on the other hand, the copper be covered by a gray deposit, it should be dried and heated in a reduction-tube in the manner already described. From several such slips of copper, or copper gauze, a quantity of metallic arsenic may be procured, sufficient, on reconversion to arsenious acid, to allow either of a solution in water being made, to which all the liquid tests may be applied, or of its conversion by nitric acid to arsenic acid. Some organic matter may be deposited in the meshes of the gauze; this may be removed, after washing in water, by warming the gauze in alcohol, or immersing it in ether or chloroform; it should be again washed in water and dried before heat is applied to it. When much oily matter is present, it is better to boil the organic substance with diluted muriatic acid, strain the liquid from it, through calico, and filter it through *a wet filter* before introducing the copper gauze. An even coating of arsenic was

by this process obtained on copper gauze from the decomposed tissue of the stomach of a person who had been buried nearly two years. As the gauze is remarkably hygrometric, it always requires to be thoroughly dried in a warm current of air before it is submitted to heat in a reduction-tube. The arsenical nature of the deposit on copper must be then established by the microscope and the tests already described. In a fine sublimate, derived from some hay in the stomach of a horse that had been killed by arsenic, I counted twenty-eight distinct crystals of arsenic (arsenious acid), in a space the 1-2000th of an inch square. The greater number of these crystals had a diameter of the 1-2000th of an inch; some distinct octahedra, which had a diameter less than the 1-4000th of an inch, were recognized among them.

By this process, the 144th part of a grain of arsenic was detected in two fluid-drachms of gruel, milk, porter, and other organic liquids, in so many different experiments. It was also thus easily separated from wine, brandy, the liquid contents of the stomach, the blood, and the tissues of the viscera. Here our analysis might be closed, if the object were to determine only the *presence* of arsenic, since a case can rarely occur in Medico-legal practice, in which it would be necessary to extract the *whole* of the poison from the contents of the stomach or intestines, or from all parts of the body.

Another process for procuring evidence of the presence of this poison in liquids, consists in transforming the arsenious acid to the state of sulphuret, by a current of sulphuretted hydrogen. The liquid should be first boiled, a little diluted muriatic acid added, and then filtered to separate organic matters. This object may be further accomplished by adding to the filtered liquid, when cold, one-third of its bulk of alcohol, again filtering and concentrating the liquid by evaporation. Sulphuretted hydrogen gas may now be freely passed into the liquid acidulated with either of the acids mentioned. When the precipitation has ceased, the liquid should be filtered, the precipitate collected, and

dissolved in ammonia to separate it from organic matter; it may then be obtained by evaporating the ammonia. That the yellow compound is sulphuret of arsenic may now be proved by the tests elsewhere described. The sulphur process succeeds only when the quantity of arsenic is large.

Arsenic is soluble in oil. It may require analysis either in this state, or mechanically diffused in fat, butter, tallow, or similar substances. From these mixtures it may be separated by boiling them in a sufficient quantity of water, with about one-tenth part of muriatic acid. The aqueous solution may then be freed from the oil or fat by passing it through a filter previously saturated with water, and the arsenic obtained by sulphuretted hydrogen, or by Reinsch's process.

Contents of the stomach—Vomited matters.—The contents of the stomach are often mixed with lumps of arsenic, which may be separated by throwing those portions that do not pass through a filter into a large glass of distilled water, and after giving to it a circular motion, suddenly pouring off the supernatant liquid, when the heavy portions containing arsenic will be found at the bottom. The lumps may sometimes be left in the contents; they may then be easily removed, dried on filtering paper, and tested. If the arsenic has been taken in fine powder, there will be no lumps, but it will probaby be deposited in masses, mixed with mucus and blood, on the coats of the organ in those parts where it is much inflamed and ulcerated. The arsenic in this state looks like moistened plaster of Paris, but it is of a darker color, and when examined by a lens it is crystalline. It may be removed on a spatula, spread in masses on filtering paper, and slowly dried. As it dries, the granules will detach themselves from the mass. It is necessary to examine the arsenic carefully, with a view of determining whether the white particles are or are not mixed with either of the coloring matters required by the Act of Parliament,—indigo or soot. The microscope should here be used for the examination of the dried sediment, and after this examination it may be tested either by the reduc-

tion test or by Reinsch's process. The suspected particles, or even the stained portions of paper on which the organic matter has become dried, may be boiled with muriatic acid and copper gauze. Mucus, blood, or even a layer of the mucous membrane of the stomach may be thus easily tested. This is in general the only method which it is now necessary to employ. By the use of numerous tests and processes, a witness exposes his evidence most unnecessarily to many ingenious objections. It is sufficient to obtain the deposit on copper; to convert this by heat to crystallized arsenious acid, and to test the sublimate. We thus avoid the troublesome and complex method of separating organic matter from arsenic. Care must be taken in examining a stomach not to confound pieces of bread, or lumps of fat or adipocere with arsenic. Small portions of such substances appear very much like lumps of the poison. In the stomachs of exhumed bodies a crystalline substance is found, resembling arsenic in appearance, but not in properties. It is the ammonio-phosphate of magnesia derived from putrefaction.

The liquid contents may yield no arsenic, although the poison is present. I have found solid arsenic spread over the coats of the stomach in two cases, when the liquid contents yielded no traces of the poison in solution. In the same way I have detected no arsenic dissolved in tea when it was abundant in the sediment. If none should be found either dissolved in the contents of the stomach or on the surface of the organ, we must remove the inflamed and ulcerated portions of the mucous coat, or even the whole of the stomach cut into small pieces, and boil the cut portions with diluted muriatic acid and copper for half an hour. The liquid may be then filtered and tested. It may happen that no arsenic will be detected in the contents of the stomach or vomited matters, until after they have been boiled for at least one or two hours, and the organic matter broken up.

Detection of absorbed arsenic in the tissues.—When arsenic can not be detected in the liquid contents of the stomach, it is necessary to examine the blood, secretions, muscles, or viscera

of the deceased for that portion of the poison which has been *absorbed*. In most cases of acute poisoning, arsenic will be found, but in variable quantities, in every one of the soft structures of the body,—more abundantly in the organs of the abdomen than elsewhere. In general a medical witness has it in his power to make a selection; but even here criminal ingenuity may be exerted to defeat his evidence. In a case tried in France, in 1846, the body of a man named Glœckler, who was alleged to have died from poison administered by his wife, had been clandestinely removed, and thrown into the soil of a privy, where it was subsequently found. The abdomen had been opened, and the organs removed, with the intention of obliterating all traces of the criminal act which had been perpetrated. The proof of criminality rested entirely upon the chemical evidence, for the symptoms were not well marked. It was clearly shown at the trial, that the wound in the abdomen had been made after death; and arsenic was readily extracted from the soft parts of the body in sufficient quantity to be weighed. The accused was convicted. From this account, it will be perceived, that but for the process of detecting arsenic in the tissues, this crime must have passed undetected and unpunished. Except by the entire destruction of the body in a case of arsenical poisoning, a criminal can not now defeat the objects of a chemical investigation. Dr. Schaffer met with a case in which an attempt was made by the accused to destroy the dead body by fire. A woman had suffered from symptoms of poisoning by arsenic, and died in about eight hours. Notice was given to the husband that there would be an inspection of the body, and on the next night his house was found in flames. The dead body of the wife was so burnt that it could scarcely be recognized. The stomach, however, had not been entirely destroyed, and in the shrivelled remains of this, some particles of solid arsenic were found. The facts were clearly proved against the husband.

In the case of the Queen *v.* Hunter, tried at the Liverpool Spring Assizes, 1843, arsenic could not be detected in the con-

tents of the stomach and bowels; as no analysis was made for absorbed arsenic, the benefit of the omission was given to the accused person. In the case of the Queen *v.* Thomas, no arsenic was found in the contents of the stomach and intestines of one of the deceased persons; but the poison is stated to have been detected in the liver by the coarse process of incineration with nitre. This evidence, although attacked in cross-examination on the ground (now refuted) that arsenic was a natural constituent of the body, was received as a satisfactory proof of the presence of the poison. There are few cases in which this branch of the analysis should not be resorted to, although it entails much additional trouble. The detection of arsenic in the *tissues* makes it clear, under the limitations elsewhere pointed out, that the poison must have been introduced during life, and that it has most probably caused death; its detection merely in the *contents* of the stomach or intestines, does not give this absolute proof. Beside, the poison found in these contents is not that which has caused death; this, as it has been elsewhere stated, must be referred to the portion of poison which has entered the blood by absorption. It is worthy of remark that under the Medical Witnesses' Act (6 and 7 William IV, c. lxxxix), a medical practitioner is only required to make "an analysis of the *contents* of the stomach or intestines," and for this only is a fee allowed!

The process commonly employed for the discovery of arsenic in the tissues, are those of Marsh and Reinsch; and *Marsh's process* has been almost universally employed by continental and English chemists. When an organic liquid, containing arsenic, is placed in the apparatus, there is a frothiness produced which interferes with the combustion of the arsenuretted hydrogen. Various plans have been proposed to remove this inconvenience by destroying the organic matter, and procuring the arsenic in a form convenient for testing. In 1839, Orfila suggested the deflagration of the organic matter (brought to a state of dryness) with powdered nitre. He subsequently advised that the organic matter, finely cut up, should be boiled in a weak solution of

potash, and mixed with twice its weight of pure powdered nitre. The saline residue obtained on evaporation was then deflagrated by projection in small quantities in a red hot crucible. Another of his plans consisted in decomposing the organic matter by strong nitric acid,—bringing it to the state of a dry carbonaceous mass,—and acting on this by nitro-muriatic acid. The arsenic was subsequently dissolved by water, and then placed in the apparatus. These processes occasioned a great loss of arsenic, and they had the disadvantages that the presence of any nitric acid or a nitrate interfered with the production of arsenuretted hydrogen. MM. Danger and Flandin recommended the complete carbonization of the organic matter by heating it in a quantity of strong sulphuric acid (proved to be free from arsenic), equal to about one-third of the weight. It thus forms a tarry-looking mixture, which should be brought to dryness. The dry carbonaceous mass is then treated on the plan recommended by Orfila. The vapors evolved during this operation are of the most offensive and persistent description.

If sulphuric acid can be obtained pure, there is no doubt that this is the best mode of carbonizing organic matter. The carbonaceous ash should not be too strongly heated, or, as pointed out by Blondlot, there will be a loss of arsenic. It will be found better for the conversion of the arsenious into arsenic acid, to use strong nitric in preference to nitro-muriatic acid, as this will avoid the volatilization of arsenic as chloride. After heating the mixture to expel the greater part of the nitric acid, the ash may be drenched with water, until all that is soluble is removed. This may be brought to dryness in a porcelain vessel, and again treated with nitric acid several times, until the residue is without color. The acid residue dissolved in water should be neutralized by pure carbonate of potash, and when again brought to dryness, the arseniate of potash thus produced (if arsenic were present) may be separated from the other salts by a small quantity of water. This solution may be introduced into Marsh's apparatus. If a deposit of metal is obtained on glass, or porcelain, or a ring

of metal in a tube, by heating the current of gas, these must be tested by the methods already suggested. When Marsh's process is employed, I have found this to be the best plan of proceeding for destroying organic matters and avoiding a loss of arsenic.

In the event of Reinsch's process being selected at this stage, it will be necessary to reconvert the arsenic acid, obtained by the above-mentioned carbonizing process, to arsenious acid. This is effected by evaporating it to dryness with a strong solution of sulphurous acid.

Fresenius and Babo destroy the organic matter by hydrochloric acid and chlorate of potash, and advise a series of proceedings of a most minute and elaborate kind. In fact, this mode of detecting arsenic may be designated an exhaustive process. It provides for the exclusion of lead, bismuth, mercury, copper, tin, antimony and other metals; but in thus excluding many bodies which are never likely to be found, it encumbers the investigation with the employment of so many chemicals, that a question might fairly arise whether arsenic had not been actually introduced into the organic matter during the operation. I have known only one case in which it has been Medico-legally employed in this country, that of Reg. *v.* Wooler, and there fortunately the proof of death from arsenic was so clearly made out from other facts, that it was unnecessary to make this elaborate mode of testing a subject of cross-examination. The reader who is curious about this process, the complication of which, according to Orfila, surpasses all credibility, will find the details in Orfila.

Reinsch's process.—I have found that *Reinsch's process*, without any preliminary carbonization, is well adapted for the separation of absorbed arsenic. I have by it separated arsenic from all the organs of the body, excepting the brain and spinal marrow. The organ suspected to contain deposited arsenic, is cut into the thinnest pieces. It is then digested at a gentle heat, with a mixture of one part by measure of muriatic acid (proved to be free from arsenic), and eight parts of water. When the structure of

the organ is broken up, a piece of copper gauze, at the end of a fine and polished copper wire, is put into the vessel, and the liquid brought to the boiling-point. If no deposit takes place in a few minutes, a little more muriatic acid may be added. If after half an hour, there is no change of color in the wire or gauze, there is probably no arsenic present. The liquid may now be boiled down on the copper, and the metal again washed and examined. The quantity of gauze used must be small, until there is clear evidence of a free deposit, and then a number of pieces may be successively added until the arsenic ceases to be deposited. The pieces of gauze which are coated, should be well washed in water, and if necessary in alcohol, to separate adhering organic matter. They may then be tested for arsenic by the processes already described. The only precaution required here, is that the muriatic acid should be pure. The water, the copper, the acid, and the vessel, may be tested for arsenic before the addition of the substance supposed to contain it.

In January, 1852, six ounces of a thick turbid fluid were taken from the stomach of a dog supposed to have been poisoned. As there was no poison present,—the copper gauze remaining unchanged in color, five drops of a solution of white arsenic, equivalent to (·06) six hundredths of a grain of the poison, were put into the mixture, and the whole was well stirred. In ten minutes the copper was coated of a steel-blue color, and crystals were obtained from it by heat. The 16th part of a grain of arsenic was here detected, in about forty thousand times its weight of a complex organic liquid.

Sometimes the red color of the copper is seen, owing to the thinness of the arsenical deposit. In all cases it is advisable to dry the gauze, to heat a portion of it in a reduction-tube, and examine the sublimate, if any, by the microscope, before giving an opinion that arsenic is absent.

Either of these processes will enable the analyst to separate arsenic from the tissues. By Marsh's process he can accumulate in a porcelain capsule, in a state convenient for testing, any

number of metallic deposits. In reference to Reinsch's process, as soon as the copper is covered by arsenic, the chemical effect ceases: the use of gauze allows the operator to concentrate a large quantity of arsenic in a small space. This yields a ring of crystals sufficient for testing, or it may be made so by heating a number of pieces successively. There can be no doubt that Reinsch's process is the most simple, and the least open to objection in respect to the casual introduction of arsenic, as neither zinc nor sulphuric acid is required. It has also this advantage; while searching for arsenic in the tissues, it enables the operator to discover and separate at the same time both mercury and antimony, without interfering with the search for arsenic.

There is no doubt that a portion of arsenic is lost by either process, and from the researches of Dr. Geoghegan, it appears that but little more than one-half of the arsenic deposited on copper in Reinsch's process can be reobtained by sublimation in the crystalline state, the rest being retained as arsenuret of copper. So in the combustion of arsenuretted hydrogen in Marsh's process, there is an unavoidable loss of arsenic on each occasion that the jet is opened. Either process is, however, so delicate, that even making due allowance for loss of the poison, the arsenic will be easily revealed when forming not more than from the 1-150th to the 200th part of a grain, and this is itself a point of delicacy in an analysis which, when the issues of life and death are involved, might almost suffice to justify a reasonable distrust of the resources of science. Orfila professed to have detected the 2,000,000th of a grain by Marsh's process, but the smallest quantity on which he ever ventured to give evidence before a legal tribunal was in the well-known case of Madame Laffarge. His evidence, however, was strongly objected to. He admitted that the quantity which he obtained from the body of the deceased was too small to be weighed, but estimated it roughly at half a milligramme, *i. e.* about the *one hundred and thirtieth* part of a grain! In this country, I am not aware that chemical evidence of the presence of arsenic in a dead body has ever been based

on a smaller quantity than in the case of Margaret Wishart. Dr. Christison did not detect more than the *one-fortieth* part of a grain of arsenic in the coats of the stomach; but this was deemed sufficient chemical evidence, and the prisoner was condemned and executed. The smallest quantity on which I have had occasion to give evidence in criminal trials, was from half a grain to a grain, estimated as the quantity actually obtained in crystals from the stomach, intestines, and tissues. In these two cases, the accused were tried and convicted on the charge of administering poison with intent to murder. The cause of death was not here at issue.

Nevertheless there is a strong prejudice among lawyers that the chemical evidence is defective unless the quantity found is sufficient to cause death. The irrelevancy and the absurdity of such a proposition, in a medical point of view, has been elsewhere pointed out. It would be just as reasonable, in a case in which a man had been killed by a discharge of small shot, to insist upon a failure of proof of the cause of death, because only a single pellet had been found on the body. The value of chemical evidence does not depend on the discovery of any particular *quantity* of poison in the stomach,—it is merely necessary that the evidence of its presence should be clear, distinct, conclusive, and satisfactory. At the same time a reasonable objection may be taken to a dogmatic reliance upon the alleged discovery in a dead body of minute fractional portions of a grain; and considering the great liability to fallacy from the accidental presence of arsenic in the articles used, the chemical evidence in the case of Laffarge was of a most unsatisfactory kind, and should have been rejected by the court. No man with any respect for his character, or for the common sense of a jury, would base chemical evidence on the thousandth, or less than the thousandth part of a grain of poison in a case of life and death; although he may make use of his alleged power to detect this, or even a smaller quantity, for the purpose of procuring the acquittal of a notorious criminal.

QUANTITATIVE ANALYSIS.—The quantity of arsenic met with in

a free state in the stomach and bowels after death, is subject to great variation. The quantity found has varied from half a grain to two ounces, or 960 grains. The circumstances which affect this quantity have been elsewhere considered. In dealing with a liquid article of food or with the contents of a stomach, assuming that the arsenic is dissolved, we pursue the same plan. In some cases, solid arsenic, in lumps or powder, may be separated by washing from the contents. In this case we simply collect it, dry it, and weigh it. A measured portion (one-fourth or one-sixth) of the liquid should be acidulated with diluted muriatic acid, boiled and filtered. A current of sulphuretted hydrogen may now be passed into it, until there is no longer any precipitation. The liquid should be again boiled, and the precipitated sulphuret of arsenic collected by decantation or on a filter, and thoroughly washed. While still moist, it may be dissolved in ammonia, and the ammoniacal liquid filtered into a balanced capsule, from which the ammonia may be driven off by evaporation. The sulphuret of arsenic dried at 212° may now be weighed, and as every *hundred* grains of shulphuret represents *eighty grains* of white arsenic (100 : 80·4), the quantity of the latter may be found sufficiently close for practical purposes in multiplying the weight of the precipitate by 4 and dividing the product by 5.

When we are dealing with the tissues, the quantity of arsenic is generally too small for the application of this method. In all cases, the *deposited* arsenic is in very small proportions, rarely exceeding a few grains in an organ like the liver weighing four or five pounds; and, according to Flandin, although this statement is not in accordance with the experience of others, *nine-tenths* of the deposited arsenic are found in the liver, the other tenth being unequally diffused through the other organs. As a general rule, the liver will be found to contain the largest proportion, and next to this the spleen and kidneys, the heart and muscles containing the smallest proportion. I have sometimes found none in the liver, while it has been present in the other organs, and even in the bile contained in the gall-bladder.

In order to determine the proportion of absorbed arsenic in an organ (*e. g.* the liver), which, under any circumstances, can be done only approximately, we take a weighed quantity (four ounces), slice it, and treat it by Reinsch's process, separate the whole of the arsenic by copper gauze, and determine or estimate the weight of the sublimates obtained,—doubling this weight to allow for the unavoidable loss, and calculating from the quantity found in four ounces, the quantity diffused through the whole of the liver. Another portion of liver may be examined, if necessary, to correct the result. I believe that the quantity thus determined is always below the amount actually present. Some prefer the determination of the quantity from a given weight, by passing the arsenuretted hydrogen, generated in Marsh's apparatus (by the process heretofore described), into a weak solution of neutral nitrate of silver, until there is no longer any blackening. The arsenic is here supposed to be converted entirely to arsenic acid; the surplus silver is cautiously removed by hydrochloric acid, and after filtration and evaporation to dryness, the arsenic is precipitated from the residue dissolved in water by sulphuretted hydrogen. Another plan consists in passing the arsenuretted hydrogen through a tube of infusible glass, dipping into a solution of chloride of gold, and when air is expelled, applying heat to the tube. Metallic arsenic is deposited, and any portion of gas which escapes decomposition is collected and dissolved in the solution of gold, which it decomposes. The quantity thus obtained, is determined by a process similar to that above-mentioned. In pursuing these methods, there may be a loss of arsenic in carbonizing and heating to dryness the organic matter with sulphuric acid; a portion of arsenic is liable to be separated and deposited in the apparatus used; and it is not improbable that a portion combines with the reduced silver and gold.[1]

[1] Taylor on Poisons.

CHAPTER XXXV.

LEADING ADJUDICATED CASES IN ARSENICAL POISONING.

REX *v.* MARY BLANDY, Tried in 1752; Smith Med. Ev. 198.

THE case of Mary Blandy, tried at Oxford, for the murder of her father, in 1752, is perhaps the oldest case of arsenical poisoning of importance on record, where we have a complete account of the medical testimony.

Dr. Addington testified that he found the deceased, when he first saw him, in bed, and that he told him, that after drinking some gruel, he had perceived an extraordinary grittiness in his mouth, attended with very painful burning and pricking in the tongue, throat, stomach, and bowels, and with sickness and gripings, which had been relieved by vomiting and purging. That on drinking the gruel he every time tasted the grittiness and became more sick. That it did not result from any medicine he had taken. His tongue was swollen, his throat raw, his bowels swoolen;—his upper lip was dry and rough, and had angry pimples on it. His eyes were bloodshot; his pulse low, trembling and intermitting.

He told Miss Blandy that he thought her father had taken poison: she said it was impossible. As he passed out, a paper was put into his hands, said to have been thrown into the fire by Miss Blandy. The fire had not consumed it, and there was an inscription on it, as follows: "the powder to clean the pebbles with." The paper contained arsenic. The same kind of powder was found in the gruel.

The deceased being asked if he thought he had taken poison,

and if so, from whom; said he thought he had, and from "a poor, love-sick girl. I forgive her. I always thought there was mischief in those cursed Scotch pebbles." The deceased continued to grow worse. His hands trembled; his face was cold and clammy; he was at times delirious; he was like a person bit by a mad dog; he wanted to drink, but could not swallow. His symptoms all indicated that he had taken white arsenic. Dr. Lewis corroborated Dr. Addington in every particular, and said it was his absolute opinion that the deceased died of poisoning by arsenic.

We learn from this trial, the process of detecting arsenic, one hundred years ago. Dr. Addington was asked by counsel, on cross-examination, how he knew the article in the paper was arsenic. He replied, that: 1st, This powder has a milky whiteness, so has white arsenic: 2d, This is gritty, and almost insipid, so is white arsenic: 3d, Part of it swims on the surface of cold water like a pale sulphureous film; but the greater part sinks to bottom, and sinks there undissolved; the same is true of white arsenic: 4th, This thrown on a red-hot iron does not flame, but rises entirely in thick white fumes, which have the stench of garlic, and cover cold iron held just over them, with white flowers; white arsenic does the same: 5th, I boiled ten grains of this powder in four ounces of clear water, and then, passing the decoction through a filter, divided it into five equal parts, which were put into as many glasses. Into one glass I poured a few drops of sal ammoniac, into another some of the lixivium of tartar, into the third, some strong spirits of vitriol, into the fourth, some spirits of salt, and into the last, some syrup of violets. The spirits of sal ammoniac, threw down a few particles of pale sediment; the lixivium of tartar gave a white cloud, which hung a little above the middle of the glass; the spirits of vitriol and salt made a considerable precipitation of a lightish-colored substance, which in the former hardened into glittering crystals, sticking to the sides and bottom of the glass; syrup of violets produced a beautiful pale green tincture. Having washed

the sauce-pan, funnel and glasses used in the foregoing experiments very clean, and provided a fresh filter, I boiled ten grains of white arsenic, bought of Mr. Wilcox, druggist in Reading, in four ounces of clear water; and filtering and dividing into five equal parts, proceeded with them just as I had done with the former decoction. There was an exact similitude between the experiments made on the two decoctions; they corresponded so nicely in each trial, that I declared that I never saw two things in their nature more alike, than the decoction made with the powder found in Mr. Blandy's gruel, and that made with white arsenic. From these experiments and others, which I am ready to produce if desired, I believe that powder to be white arsenic." These were crude experiments, and at this day would prove nothing. He did not, by these experiments, detect arsenic, but some of the foreign substances with which arsenic is sometimes combined. The "spirit of sal ammoniac,"—*subcarbonate* of *ammonia*,—in the experiment decomposed the *sulphate of lime*, with which white arsenic is often adulterated, and the *subcarbonate* of potassa, "lixivium of tartar," for the same reason would precipitate a white substance, as stated in the evidence. The "white glittering crystals" were also lime, in all probability.

Mr. Blandy may have been poisoned, and probably was; his symptoms indicated it. There was no *post mortem* examination, and the analysis was most unsatisfactory, or would be so now. The daughter expiated her crime on the scaffold, declaring to the last that she was innocent.

REX *v.* ELIZABETH FENNING, Tried in 1815; Smith's Med. Ev. 207.

Elizabeth Fenning was tried and executed at the Old Bailey, in 1815, for administering arsenic, with intent to kill. She was charged with mixing arsenic with yeast dumplings, and thus poisoning Mr. Jones' family.

Mr. John Marshall, testified that he was a surgeon, that he saw the family soon after they had been taken sick, that all the symptoms attending the family were produced by arsenic. "I

have *no doubt* of it by the symptoms; the prisoner was also ill by the same, I have no doubt." He was shown a dish the next morning; he examined it, washed it in a tea-kettle of warm water, stirred it, and let it subside, decanted it off, found half a teaspoonful of white powder,—found it to be arsenic. Question by counsel. "Will arsenic, cut with a knife, produce the appearance of blackness upon the knife?" "*I have no doubt of it.*" Mr. Marshall found arsenic, simply from examining the *plate* alone on which the dough had been made up. No examination of the vessel or water in which the dumplings were boiled. No inquiry as to where the water or flour came from, or the salt or the milk. Mr. Marshall had no doubt that it was arsenic just from looking at it. This is all very loose. Throughout the whole case there is no evidence of any poison being administered.

In the case of Eliza Ward, tried in 1816, a medical witness testified, in answer to a question from Mr. Justice Bailey as to how little arsenic would produce death, that he thought *one hundred and twenty grains* would be sufficient, though of that sold in the shops, it would require *one ounce and a half;* that sixty grains would produce violent retching, and the effect would be greater still on an empty, than on a full stomach, and much would also depend upon the strength of the person to whom it was administered.

REX *v.* ROBERT SWALE DONNALL, Tried 1817; Smith Med. Ev. 212.

Donnall, a surgeon of Falmouth, England, was tried for poisoning his mother-in-law, Mrs. Downing, with arsenic. It appeared that when Mrs. Downing eat at the defendant's on the 2d of November, she became sick, and continued ill four days. Dr. Edwards swore that he saw her on the 3d. Mr. Donnall informed him that Mrs. Downing had an attack of *cholera morbus*, and that she had a similar attack a fortnight before. Mrs. Downing felt heat in her stomach and also cramps in her legs; her pulse was a frequent fluttering pulse. Cholera morbus produces death in two or three days; never met with a case that produced

death in less than that time. This patient, therefore, could not have died of *cholera morbus*. She died the next morning. Went Thursday afternoon to examine the body as to the cause of death, was requested by the coroner to make the examination. Mr. Donnall was there, and Mr. Street, a surgeon. Mr. Donnall prepared to operate,—told him he was to have nothing to do with the operation. The stomach was opened and examined, and the contents poured into a basin. "*We examined that which was put into the basin with our fingers, in order to ascertain whether any heavy or gritty substance had subsided to the bottom;* found no deposit of any heavy substance." The stomach was inflamed, in parts stellated, coats of stomach softened, and some parts nearly destroyed by some corrosive substance; the intestines were inflamed. Such an inflammation could not be produced in that time by any natural cause; any active poison will produce such an effect in so short a time. Mr. Donnall had emptied the jug into another vessel while we were examining the other parts of the body. Took the contents and examined it with different chemical tests, and they all showed the presence of arsenic,—"detected arsenic in solution, but not in substance," "have no doubt that death was produced by arsenic."

The prisoner claimed that the death resulted from *cholera morbus*, that the post mortem examination revealed the appearances of cholera morbus. He introduced a number of physicians who swore they believed the deceased died of cholera morbus.

The tests used in this case were, as usual, very unsatisfactory; but, singularly enough, the prisoner was acquitted in the face of an able and one-sided charge against him from Mr. Justice Abbott, afterward Lord Chief-Justice.

REX *v.* ANN BARBER, Tried in 1821; Smith's Med. Ev. 233.

The leading medical witness gave the following very unprofessional testimony on the occasion. "I am a surgeon and apothecary at O——. On Saturday, March 17th, I was sent for, to

see the body: I went on Sunday morning, when the inquest was sitting, and opened the body: I was able, very clearly, to ascertain the cause of death: I found the stomach in a very putrid state; the coats were much corroded; it was very much inflamed indeed; the death I attributed to mineral poison. It is within my knowledge and experience that mineral poison would produce the effect I observed. From the coats of the stomach I took mineral poison; it was white arsenic; I proved it by a solution of ammoniated copper; the solution is purple; on putting arsenic in it, it becomes quite green. Nitrate of silver does the same; it is a very delicate test; I tried it by both, and found the same result. I know of no other substance but arsenic that does convert them into green; I am satisfied that it was arsenic. I opened the body further; the lungs were very black, which I look upon as a criterion of mineral poison; the external appearances were the same as I saw in cases where it was known that arsenic had been taken. On the body of the deceased were various livid spots; the *skin of the stomach* was quite green, twice the breadth of a man's hand. I was satisfied from the appearance that he had died of mineral poison."

Cross-examination.—"I never saw the body till Sunday morning, between eleven and twelve; and he died on Saturday morning at four, I understood. The ears were black, the finger-ends were black; convulsions would make the body look black; appearances in so aggravated a state could not be produced but by mineral poison. Matter issued from the mouth, which is another criterion; convulsions are produced by many causes quite distinct from poison. I can not tell how many mineral poisons there are. *I never applied the test before, and never saw any other person apply it.* The presence of arsenic may be detected by red-hot iron; upon that a smell, as of garlic or onions arises. I did not try that test; I was sufficiently convinced without that. *This poison is a subject I am very little acquainted with.* The lungs could not be so black, had there not been arsenic given. I did not open the head, there was no

occasion. None of the circumstances, but all together, convinced me that the death proceeded from poison; there was not one circumstance inconsistent with that conclusion."

Only thirty-eight years ago, this kind of medical testimony sealed the fate of this victim in England.

REX *v.* MARY SMITH, Sym's Judiciary R. 93.

The progress and certainty of science is illustrated, almost for the first time, in the case of Mary Smith, tried in Edinburgh, in 1827, for administering poison to her servant, Margaret Warden. The deceased was pregnant by the prisoner's son. The supposed poison, it appears, was twice given to her. From the first, which was taken at night, no decided effect seems to have accrued. She complained of pain, and was sick and vomited. The second dose produced thirst, vomiting and purging, and violent pain in the bowels, and these symptoms were followed by prostration, stupor, cold extremities and a feeble pulse. Death followed in thirty-six hours. An examination of the body took place two days after; there was considerable putrefaction externally, yet the stomach and bowels were in a state of "wonderful preservation." The inner coat of the stomach was raised and separated in many places from the adjoining ones, and in other places was corrugated and abraded. Blood was extravasated under it. The intestines bore marks of vascular excitement.

The fluid found in the stomach amounted to ten or twelve ounces, and yellow particles floated on it. Similar particles also adhered to it. The physicians of Dundee examined a portion of the contents by the liquid tests, and then reduced some with the black flux. With each, indications of arsenic were given. Dr. Christison made a similar investigation, and also obtained the metal. The court supposed it had sufficient evidence to convict the prisoner, but the jury did not so think.

REX *v.* WISHART, Sym's Judiciary R., Appendix 1.

Wishart was tried in Scotland, convicted and executed, on the testimony of Dr. Christison. He was charged with poisoning a pregnant sister, by introducing arsenic into the porridge eaten by deceased. It was eaten on Tuesday evening, the usual symptoms of arsenical poisoning supervened. On Friday the deceased was delivered of a living child, and on Saturday she died. Eight days after the body was disinterred; there was a small perforation in the stomach, and the villous coat was very vascular, and in some places abraded. The intestines were very red. The contents of the stomach, and a portion of the viscus were submitted to the action of tests, but in none of these did the silver and copper tests give any indications of arsenic. After the liquor had been acidulated with acetic acid, sulphuretted hydrogen yielded a yellow precipitate, which was reduced by the black flux. Dr. Christison afterward converted the crust, by repeated sublimation, into little octahedral crystals of oxide of arsenic, which he estimated to amount to about *the fortieth part of a grain.* In the stomach, there were appearances of the sulphuret.

Orfila furnished to the French government the necessary evidence for the conviction of one Urbain X., under the following circumstances:

In 1832, three persons, named Teiner, all in good health, experienced severe colic and nausea, followed by violent vomiting, after eating cabbage soup. Others who had eaten of it were affected in the same way. Two of the three died, the other continued infirm through the effect of what they had eaten. The disease was pronounced to be gastro-enteritis. Urbain succeeded to their property. It was ascertained soon after, that he was in possession of a large quantity of arsenic. It appeared, that a few days before the sickness he called to dine with a brother and sister-in-law, and talking about the quality of their new corn, expressed a wish to see it. The wife, who was about to bake, had recently put flour in the chest. She showed the flour to

Urbain, who took up a handful of it, and in a few seconds threw it back again into the chest, saying it was better than his. Soon after she made her bread. Twelve persons ate of it, and all were attacked with violent colic and frequent vomiting. When they resumed the use of the bread the sickness came on, and at no other time. Had others of the party died, Urbain would have inherited their property also.

These circumstances led to a chemical examination of the bread. Two chemists were commissioned, but could find no poison. It was then committed to Orfila. He cut the bread into small pieces, tested it with distilled water, filtered the liquid, and tested it by concentrated liquid sulphuretted hydrogen. The fluid became instantly yellow, but was not sensibly troubled. A few drops of muriatic acid were now added, to precipitate any sulphuret of arsenic that might form. It was not until several days had elapsed, that a yellow precipitate, consisting of sulphuret of arsenic and organic matter, was deposited. This precipitate being washed with distilled water, was placed on a little filter, and washed with very weak ammonia. Thus the sulphuret was dissolved and the organic matter left. The ammoniacal solution was now evaporated to dryness, and the residuum mixed with a little charcoal and carbonate of potash. The organic matter was then driven off by the application of gentle heat. And finally the watch-glass and its contents were pulverized in a mortar and the powders introduced into a tube, the upper end of which was drawn out in the spirit-lamp. As soon as it become of a red heat, metallic arsenic quickly appeared.

In other cases like this, Orfila has detected arsenic when others failed, by being longer, more careful and more skillful in the application of his tests.

For correctness of observation, clearness of detail, and conclusiveness of results, the experiments are justly celebrated, having done much to establish the certainty of arsenical tests.

The most important American adjudicated cases are the following:

COMMONWEALTH *v.* LUCRETIA CHAPMAN AND LINO MINA, 2 Beck, 543.

Lucretia Chapman and Lino Mina were tried for the murder of William Chapman, in Philadelphia, in 1831.

Mr. Chapman, it was supposed, died of cholera morbus. But the marriage of Mrs. Chapman with Mina excited suspicion, and the body was disinterred, about two months after interment.

The prisoner, Mina, was a lodger in the house of Chapman, and became enamored of Mrs. Chapman, and she of him. There was an attempt to poison Mr. Chapman on the 17th of June, but it failed. On Monday the 20th, the arsenic was given to him in soup. The usual symptoms of burning heat in the stomach supervened, with vomiting and purging; no physician however saw him until the 21st, when Dr. Knight visited him. He was deaf, his extremities were cold, and he was at times delirious, no fever; but pulse very feeble. He soon afterward had bloody stools, and died on the 23d. The physicians being friends, called, hearing of his sickness, without being sent for.

The post mortem appearances were a livid and putrid face, no offensive odor from the body. The abdomen was firm and remarkably resistant. A very peculiar smell arose from the stomach when cut open, which the witness compares to pickled herring. The internal surface of the stomach was covered with dark brownish-colored mucus, and presented an inflammatory appearance. The distinguished J. K. Mitchell, of Philadelphia, examined the contents of the stomach. The mucus was subjected to one form of analysis, and the solid parts to another.

Distilled water was added to the mucus, and the whole boiled in a Florence flask for some time; the fluid was then filtered. The matter and filter was thrown into nitric acid. The filtered liquor was transparent and of a faint amber-yellow color. The liquid test was used. The copper test gave an undecided *grass green*,—nitrate of silver, a brownish-yellow flocculant precipitate, which grew darker and soon lost its yellowness,—sulphuretted hydrogen gas deepened the yellow tint of the solution a very

little. The whole of the liquid was then subjected to the last test, heated until it became distinctly yellow, and its transparency was gone. The whole was then left on a filter for several hours. When again examined, there was a transparent liquid below the filter, and on it a yellow substance, which could not be separated from it being in too small a quantity, and the whole, filter and all, was thrown into the vessel containing the firmer portions of the body, which were being dissolved. This solution being evaporated to dryness, was again heated with nitric acid, and evaporated until the animal matter was destroyed.

Water was added to the residue, and heat to boiling again applied. To the product obtained by filtration and evaporation, lime-water was added, and this again evaporated. A portion of this was mixed with charcoal, placed in a glass tube and subjected to the heat of a spirit-lamp. The tube became covered at some distance from the material with a black and glistening substance, but at this point of the experiment the tube broke from the action of the heat. Mr. Clemson, a highly educated chemist, instantly detected the odor of arsenic. The other portions were heated in like manner, but nothing beyond the black dark-brown matter could be obtained. There was no arsenic detected by the eye. There was a difference of opinion as to the cause of death among the medical witnesses. The analysis was not satisfactory. Mina was convicted,—Mrs. Chapman, however, escaped.

THE STATE *v.* SAGER, 2 Beck, 546.

Sager was tried in Maine, in October, 1834, for poisoning his wife. In this case there was great distress experienced immediately after taking the poison. It had been added to wine, in which an egg had been stirred. Nausea, retching and vomiting succeeded, with violent spasms, great distress at the stomach, feeble pulse, and cold sweats. The vomiting was stained with blood toward the last. On dissection, livid patches were found in the stomach, as if blood was collected betwen the coats; the

remainder of that viscus and the intestines were of a high florid color. The silver and copper tests would not act on the contents of the stomach, or the matter vomited, but the sulphuretted hydrogen produced its usual result, applied by Prof. Cleveland, the principal medical witness. The prisoner was convicted.

THE COMMONWEALTH *v.* JOHN EARLS, 2 Beck, 546.

In 1836, John Earls was tried and convicted for the murder of his wife, in Lycoming County, Pennsylvania. The case was tried by the Hon. Ellis Lewis. This case also illustrated, in a high degree, the advanced state of Medical Evidence on this subject of poisoning with arsenic. The deceased was confined on Wednesday; she was doing well, and rapidly improving on Thursday, when she was seized with violent vomiting in the evening, after drinking some chocolate. Some mint tea, also drugged with arsenic was now administered. The vomiting continued, with violent pain, particularly in the stomach, intense thirst, until she finally sunk and died. On dissection, the coats of the stomach were found highly inflamed, and easily separable; the intestines were also inflamed; the brain turgid, and the right and left auricles and ventricles of the heart each filled with blood. The contents of the stomach were examined with the usual tests, and gave complete indications of arsenic. The process of reduction was also performed. Drs. Dougal, Kittoe and Ludwig were the medical witnesses, and acquitted themselves with great credit to themselves and honor to the profession they so ably represented. The prisoner ultimately confessed the crime.

THE PEOPLE *v.* JAMES E. ELDRIDGE, New York.

James E. Eldridge was tried, December, 1857, for the murder of Sarah Jane Gould, St. Lawrence Oyer and Terminer, New York. The case is still pending on a writ of error. The defendant was convicted and sentenced by Judge James.

Dr. Ira Gibson testified on the trial, that he visited the deceased

on the 20th of May, found her vomiting, distress in the stomach, with thirst; vomited every ten or fifteen minutes; complained of a burning sensation in the stomach. Next day "her stomach felt as if it was burning up," thirst excessive; vomited once an hour. On Thursday morning was a little better, not quite so much burning in the stomach, worse in the evening; severe palpitation of the heart, hurried breathing; and on Friday her symptoms were worse, vomitings more frequent, more pain, breathing difficult. Saturday morning, nervous system much excited, extremities cold. She died Saturday afternoon. Made a post mortem examination with Dr. Paddock, soon after death. There was but little ulceration. The stomach and uterus were taken out. No indications of disease, except a little congestion of the lungs. No natural disease that would account for her death. The deceased was pregnant, advanced six or eight weeks. Never had any acquaintance with the effect of arsenic upon the system before this case.

It was supposed the prisoner also took arsenic, soon after suspicion rested on him. Dr. Gibson testified, that on the morning of the 7th, the day after the post mortem examination, he called to see the prisoner. The prisoner said he was taken in the night with sickness at the stomach. Took up a tumbler sitting by him in which there was some white powder adhering to the inner surface of it; the prisoner said he did not know what it was, that there must have been something in it when it was given to him. Scraped off some of the powder, threw it upon some coals; it went up in a white smoke, and gave off the odor of garlic. The prisoner denied having taken arsenic. He complained of a burning sensation in his stomach, was very thirsty, and vomited frequently. He continued very sick for more than a week. His symptoms were very much like those attending the deceased.

Drs. Joseph Ripley and W. A. Paddock were present at the post mortem, and corroborated Dr. Gibson.

Dr. S. N. Sherman testified, that he had bestowed some little

attention to analytical chemistry and the detection of poisons in the human system. Examined the body of the deceased at the request of the District Attorney and the court. Went to Louisville for that purpose and had the body disinterred. No bad odor. No incipient signs of decomposition of the skin. Neither the large or small intestines were distended, but appeared on their upper surface like parchment, or as if they had been exposed to the direct rays of the sun. No appearance of inflammation of the bowels, except slight traces in the duodenum. No *peritoneal* inflammation; found the stomach and uterus had been removed at a previous post mortem examination. Removed the intestinal canal, the liver, heart, spleen kidneys, lungs and bladder. He was furnished with a jar said to contain the stomach and uterus of the deceased, all of which he took away. He also took above two ounces of what purported to be Dr. Rogers' Syrup of Tar, of which the deceased had been taking. He purchased another bottle of the same with the seal unbroken. For ten or twelve days, Dr. Sherman, assisted by Dr. Page, was engaged in the analysis of these several parts. Having nothing but the solid parts of the body, these were reduced to a soluble condition by boiling them in distilled water and hydrocloric acid in a glass vessel. Reinsch's test was applied, when he obtained the presence of arsenic in the shape of crystals of the oxide of that metal. To a little distilled water, he added one-hundredth of a grain of arsenic in solution, and applied to it the same test, but got only faint indications of its presence. Then took three-hundredths of a grain of arsenic in solution, and submitted it to the same test, and got more marked results. Took six-hundredths, of a grain of arsenic and submitted it to Reinsch's test, and got still more marked evidence of arsenic, but not so evident as the first from part of the liver. Found arsenic by the same test in the liver, spleen, kidneys, intestines, heart and stomach. From the copper test got a rich green precipitate, so characteristic of the presence of arsenite of copper. The Liverwort and Tar, of which the deceased par-

took, also contained arsenic. The other bottle, that had not been opened, gave no evidence of arsenic.

The hydrogen test was also carefully applied with the same results, revealing the presence of arsenic.

These experiments enabled the witness to say: "I unhesitatingly embrace the conviction, amounting to certainty, that *arsenic* in appreciable amounts existed in the body of Sarah Jane Gould, at her death, *and was the cause of her death.*"

This witness then stated: "I have heard all the testimony of the witnesses, and Dr. Gibson, in regard to her symptoms, and it is my opinion that they were caused by the administration of arsenic." This evidence was certainly objectionable. 1. Because the witness might not have heard all that was said; his attention might not have been given to the material points in the case, though present all the time. 2. It is impossible to tell what elements entered into his conclusion. He may have considered some things that were not evidence. 3. He passed upon facts the jury alone were sworn to decide, under the charge of the court.[1]

A hypothetical case should have been given to the witness, and the jury left to determine whether the case had been made.

The prisoner was declared by the jury to be guilty, and sentenced by the court to be hung.

The case was carried to the Supreme Court on a writ of error, which was overruled, when an appeal was taken to the Court of Appeals, where the writ of error was sustained and a new trial ordered.

THE PEOPLE *v.* JAMES STEPHENS, Common Pleas, New York, 1859.

In September, 1857, the wife of Stephens died, and was buried in Greenwood. The family was in humble circumstances, of moral standing, and at the time of the death no one out of the family

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[1] Jamesons *v.* Drinkald, 32 E. C. L. R. 636; 12 Moo. 148; Ramage *v.* Ryan, 33 E. C. L. R. 604; 9 Bing. 333.

thought of any criminal agency connected with it. The deceased lay in her grave a twelvemonth, when circumstances drew attention to the causes of her death.

It seemed that the prisoner had a motive in relieving himself of his wife, which was, she was several years older than himself, and his treatment of her was unkind and cruel. He wished to marry a younger lady. It was ascertained that the prisoner purchased arsenic before the illness of his wife, and there was evidence that he administered it to her. The symptoms attending the sickness were those of arsenical poisoning. When a physician was called and had complete charge of the patient, she grew better, when Stephens was with her and gave the medicine she grew worse. The prisoner remained with her all day on the 22d of September, giving her medicine, until at three o'clock next morning, when she died.

This case, more forcibly perhaps than any other ever tried in this country, illustrates the advancement of science of late years, by which the mute body of a deceased person can be brought forth after resting a long time in the grave, and with powerful eloquence tell the story of its own death. It is also distinguished for the great ability of the Medical Evidence, especially that of Prof. Doremus, of whom Mr. Ashmead, although for the defense, said: "I would also state that I have seldom seen so able a man as Dr. Doremus, who so thoroughly understood his profession, and I feel proud that we have such a man among us; and I believe, from the ability he has displayed, that his name must at all times be recalled at the side of Orfila and the other great chemists of the world." The counsel, for both the prosecution and the defense were able, and there was never a more complete vindication of the profession of medicine than in this case.

We shall only give the Medico-legal aspects of the case.

It was in evidence that Stephens gave to his wife apples and oranges, after eating which, she always vomited. The counsel for the State asked the witness "What more did Mr. Stephens do to the orange beside cutting it up?" Objected to as leading; but

the court allowed it to be asked in this form: "What was done to that orange?" The answer was: "He first peeled it, then cut it up, then put sugar on it, and gave it to my aunt; my aunt complained of burning in the stomach, and vomiting; said she felt as if there was a ball of fire in her stomach, and if she could only get that out she would feel better; once at dinner Mr. Stephens put some rice on a plate and took it to my aunt, who was in bed; he put white sugar on the rice; the sugar was standing on the table; she commenced eating it, and Mr. Stephens went out; witness soon after went into the room and ate some of the rice."

Counsel for defense objected to evidence as to the effect of that rice upon the witness, but the objection was overruled.

"In a few minutes after eating the rice witness's head grew dizzy, and she went to her room and commenced vomiting; when she left the room her aunt was vomiting; witness continued to vomit freely until half-past five or six o'clock; her aunt came into witness's room, and said that Bella, (the little girl,) had eaten of the rice and was vomiting, and she would send for Mr. Stephens."

This evidence was again strenuously objected to by defense.

As to the symptoms attending the case, this witness said: "Stephens gave her aunt tea, lager beer, brandy, porter, ale, milk, water, coffee and lemonade; deceased first complained of red spots before her eyes, and dizziness in her head, and then she complained of a heat in her chest; she thought it was her lungs; this was a few days after she was taken sick; deceased did not complain of pain; she said there was a burning pain or ball of fire, in her chest; it grew worse each day; this was after Dr. Cadmus called, about two or three days; deceased did not vomit much at first; the color of the matter vomited was at first yellow; witness desired to correct her statement in regard to the word 'pain;' that her aunt always said she had a burning in the chest like a ball of fire; the vomited matter continued yellowish for some days, and when it changed, it became a dark color, and

seemed darker each time till she died; deceased had a running at her mouth, and remarked that she could not get her mouth clean; she wiped it with her handkerchief; deceased was always thirsty; two or three days prior to her death, a great change came over her countenance; she seemed very languid and anxious, and her eyes sank considerably, and she did not answer questions readily; the second day after Dr. Cadmus called, she laid in bed a part of the day; her limbs became weak, and her hands numb; her legs and feet were swollen; they began to swell a day or two before she died; she said her feet were cold, and she asked witness to put something to warm them; she was constantly throwing her arms about the bed, catching hold of something; her lips were swollen; her face was redder than usual; otherwise did not notice the color of her skin; the discharges from the bowels, when diarrhea sat in, were dark, and very offensive; they continued until she died; there was also a suppression of urine; witness learned of this about a week before she died; it continued until she died; deceased complained of pain in connection with this; the discharges from the bowels were also attended with severe pain."

Medical Testimony.—Dr. James R. Wood was examined by Mr. Sedgwick, the assistant District Attorney, who conducted the case for the prosecution, as respected the medical testimony. The witness testified that he was a physician and surgeon, residing at No. 2 Irving-place; made a post mortem examination on the 24th September, 1858, in presence of Dr. Doremus, and his assistant, the coroner, the director of the hospital museum, Dr. Woodward, and several others; made the post mortem examination of a female which he caused to be taken from a coffin, on the plate of which was the inscription: "Sophia Stephens. Died 23d Sept., 1857. Aged 46 years." "The Misses Bell were not in the room; caused the body to be removed by his assistant in the hospital, and by his effort and that of the witness, it was removed without dismemberment; found the skin on the anterior portion of the body of a yellow dirty color, in a remarkable state of

preservation, very little differing from a body which had recently died; it had not shrunk, and was plump and full; the face and side of the head and the anterior portion of the scalp were in an advanced state of decomposition, which was accounted for by the escape of gas in the stomach; examined the posterior portion of the body, which was in the same good state of preservation, except the skull, which was decomposed; opened the body from the sternum to the pubis, when gas escaped; this brought into view the anterior portion of the liver, the stomach, a portion of the colon and the omentum; the liver, stomach and colon were in a remarkable state of preservation; the omentum was well preserved and loaded with fat; they were as healthy and as well preserved as the specimens in the museum; the other viscera of the abdomen were also apparently healthy and well preserved; then proceeded to remove the viscera of the abdomen, first by applying a ligature round the caudial orifice of the stomach to the left, which removed the food from the æsophagus, and also the orifice to the right where the food passes, this was handed to Dr. Doremus, and placed in a vessel prepared for that purpose; then removed a portion of the liver, gall, and bladder and intestines, which were also placed in a prepared vessel; the intestines were examined, and the internal lining found in a remarkable state of preservation, and but little in their cavity; the lower part of the large intestines, the rectum and colon had their internal surface reddened; beyond this there was nothing remarkable; this indicated congestion or probaby inflammation of the parts; the other viscera, a portion of the small intestines, kidneys and uterus, were given to Dr. Doremus; the cavity of the belly contained nothing but two or three ounces of oily material, which had percolated through the tissues, which were all loaded with fat; the examination was made without cutting into the cavity of the thorax; this was next examined, and the viscera were wonderfully well preserved; the lungs and heart were in a remarkable state of preservation; the other tissues, (the pleura and so on,) were very dry, and no moisture on them; then proceeded to

examine the head and face by request of parties present, who had said there was a scar or bruise at the time of death, but the face was so far decomposed that nothing was discovered; the brain was next examined, but was very much decomposed, and a portion was given to Dr. Doremus; on another occasion the muscular tissues were examined, and they had not lost their coloring matter, but were still red, and were as well preserved as many bodies that were seen now-a-days in the dissecting-rooms of country colleges. The shroud and the napkin which were placed about the natus and vulva were preserved by Dr. Doremus, as was also some cotton found in the mouth; examined the mucous membrane of the stomach at Dr. Doremus's house; it was shrunken and harder than natural; there were large veins crossing over the stomach; there was no redness except what was noticed; the veins looked as if they were over distended or enlarged; the contents of the stomach were unusually small, only about a tablespoonful of brownish matter; there was a peculiar odor from the body, but it was not that of a decomposed body; the odor was unlike what witness smelled before, because bodies preserved for dissection were preserved in alcohol."

Dr. Robert Ogden Doremus testified that he was a professor of chemistry, and was present at Bellevue Hospital when Dr. Wood made a post mortem examination, on Friday, 24th September, 1858; one of his assistants, Dr. Zincker, was also present; "Dr. Wood made a post mortem examination of a female after she had been recognized by two ladies, (the Misses Bell,) in the presence of the coroner; the body was removed from a coffin on which was the inscription testified to by Dr. Wood; received from Dr. Wood the stomach, which had been previously tied at the cardiac and pyloric orifices, a part of the liver, the gall bladder, the kidneys, the pancreas, uterus, bladder, small and large intestines, with a portion of the lungs, the heart, a part of the brain, some oily material, together with the napkins; these portions were placed in new and clean glass jars, and conveyed to his

private laboratory, where they were chemically analyzed; arsenic was found; several portions of the liver, varying from two to eight ounces, were cut in very fine pieces, and then heated by various chemical substances, such as pure hydrochloric and sulphuric acids, hydrochloric with chloride of potash, chlorine and various gases.

Witness explained the extent of the operation of the apparatus. He illustrated by the charts and diagrams; these were prepared for Marshall's apparatus, consisting of a bottle, in which zinc, water and hydrochloric acid were used; this was in order to set free gas, which was ignited; after testing these gases, the suspected liquid was introduced, and Marshall's apparatus employed in the following way: If arsenic be introduced in a certain form, it formed a gas known as arseniated hydrogen; this was inflammable; the mode of ascertaining if arsenic was associated with hydrogen, was by placing a cold piece of glass over the flame, when, if arsenic be present, a white crystalline powder was obtained.

The results of these experiments were stains on the glass tube, some of a yellowish hue, and others of a dark appearance; witness never having met these stains before, but suspecting that yellow sulphuret of arsenic was present, the experiment was tried at the New York Medical College, and the sulphur was divided from the arsenic, but as the traces were so faint, the chemists arranged a three necked bottle, in which pure oxygen was placed, and dried by passing through a tube containing chloride of calcium, when the oxygen made its appearance at the extremity; the sulphur obtained was found to exhibit one of the properties of sulphuret of arsenic; the arsenic, or arsenious acid, (which was white,) was dissolved in water, tested with a solution of ammonia-nitrate of silver, and produced a yellow precipitate, the arsenite of silver, which dissolved in ammonia; another portion of the dissolved white precipitate was tested with the ammonia-sulphate of copper, yielding a precipitate of arsenic known as Shield's green, which dissolved in ammonia; another

portion was tested with sulphuretted hydrogen, yielding a yellow precipitate, which also dissolved in ammonia. The proofs of arsenic were as follows:

1. Yellow in color.
2. It volatilized when heat was applied.
3. It oxydized into sulphuret of arsenic and arsenic acid.
4. It dissolved in water.
5. It yielded a precipitate which dissolved in ammonia.
6. It gave the characteristic to green precipitate, which
7. Dissolved in ammonia.
8. It yielded a yellow precipitate, which
9. Dissolved in excessive ammonia.

There was no substance but arsenic known to chemists by which such results could be produced; these results were from the liver and kidneys; the stomach and intestines were examined in the presence of Dr. Wood, Drs. Budd, Zincker and witness; the stomach contained a tablespoonful of a brownish mass, resembling coffee grounds, which were retained for examination; the contents of the stomach were tested by hot distilled water and hydrochloric acid, and Marshall's apparatus, and yielded no stain, beyond what was found on the heated coil; this was an indication that no arsenic existed in these contents; it was also tested for opium, without hope of success, because the profession have yet to learn that opium can be found after so long a period; the liquid produced from the contents of the intestines was introduced, and yellow stains found, which led to the suspicion of the presence of sulphuret of arsenic, they have since been oxydized, and correspond to the liquid chemical test of arsenic; the white crystalline precipitate found was also examined by the microscope, and showed the presence of arsenious acid; the quantity taken from the intestines was scarcely half a teaspoonful.

Witness described the process by which he tested the viscera; he next presented the various tubes and glasses on which the black metallic and yellow stains appeared, and explained the tests which were used to distinguish the black metallic arsenic

from antimony, which simulated the appearance of the former. He next alluded to a statement in the coroner's report, to the effect that he had not observed such yellowish stains before, nor heard of them; but he had since seen a foot-note in a chemical work, which showed that in such stains there would be found black arsenic, arsenious acid, and lastly, sulphuret of arsenic, combined.

He then described the process pursued with ten ounces of the muscular and adipose tissues, until a powder was obtained, which was tested by aqua regia, and by means of Marshall's apparatus a metallic stain was found. Some four pounds and four ounces of the same were treated with strong hydrochloric acid, etc., and other stains were found, from which sulphuret of arsenic was procured; this was oxydized with nitric acid, neutralized by soda, and then treated with nitrate of soda, and after other tests a dark stain appeared beyond the heated coil; oxygen being passed through, seven-eighths of the stain was oxydized, and white arsenious acid was found, which, being also tested by nitrate of silver and sulphate of copper, produced the stains which attended upon such tests; one-eighth of the stain was kept for any further tests if found necessary. Wherever the metallic arsenic was heated and oxydized, the characteristic garlic odor thereof was recognized, not only by himself and assistants, but by persons present who did not expect such odor. When examining the pieces of kidney and liver also, the black stains were obtained upon pieces of porcelain; this had been considered a true indication of the presence of arsenic, but as other substances, (antimony for instance,) would give out a similar stain, the one in question was tested by hydochloride of soda, and dissolved, which antimony will not do by the same. Some of the bones were also heated with hydrochloric acid until they dissolved, the lime was removed, and sulphuretted arsenic found by the test of sulphuric acid, which subsequently became, on being tested, arsenious acid, or arsenic; the octahedral crystals were seen and could still be seen under the microscope. Subse-

quent to the coroner's report, about two pounds and two ounces of the muscular tissue were tested chemically in a special laboratory, whose doors, windows, etc., were locked and sealed when leaving, and the seals examined on returning, so that no person could enter, and no one was allowed to enter the room but Dr. B. L. Budd and witness. This process was described at great length, the result being the discovery of the presence of arsenic. The skin and a portion of the adipose tissue were treated in the same room, where the usual safeguards were used; this process was also described; it lasted about one hundred and fifty-two hours, and, having been prepared by Wooler's process for Marsh's apparatus, the black stain, indicating the presence of arsenic, was discovered, which, being oxydized, was converted into arsenious acid; another portion being oxydized, and tested, proved to be metallic arsenic; the remainder of the skeleton was next dissolved and treated by Wrensch's process, when it produced the black metallic arsenic.

The witness said that he had not mentioned all his experiments, for himself and assistant had been employed thereon almost incessantly since the day the body came into his charge, up to the present time. Estimated the amount of arsenic found at about two grains; should estimate that there was loss of the metal in the process; if one should examine a body, and there was an ounce, or half an ounce, the loss would be small, but when there would be only six grains or so, in a large body, which should be subjected to all these processes, unquestionably a great portion would be lost; it was very difficult to estimate the quantity of arsenic in the body, yet, on consultation with his assistants, he thought that from four to six grains were in the body; all the articles used in the investigation were new, and purchased for the purpose that there might be no possibility of the arsenic being thus introduced, and all other articles used in it were tested to ascertain if there were arsenic in them. We removed portions from the different parts of the coffin and shroud; they were tested and found to contain no arsenic; three

samples of the soil about the coffin was also subjected to an examination in different ways with no result; before absorption in the body, arsenic may be removed by vomiting or evacuation; after absorption, it is removed rapidly from the system through the kidneys; the removal began in twenty-four hours, witness took the sixteenth of a grain of arsenic three times in a day; the urine voided in twenty-four hours was examined by Waller's method, and metallic arsenic obtained; believed that arsenic did not exist as a natural constituent of the human body; he believed this because chemistry had not detected it, except in cases where there was known to have been poisoning by arsenic.

At the request of the court, witness explained the difference between metallic arsenic and arsenious acid, sulphuret, and the other forms of arsenic. A fatal dose of arsenic was variously estimated at from one and a quarter to four grains; the amount required would depend upon the manner and form given, and other circumstances, which the witness detailed. In the case of Mrs. Stephens, arsenic was found in the contents of the large and small intestines, throughout the viscera, in the adipose and muscular tissues, in the skin, and in the bones; the symptoms of arsenical poisoning in the human body varied in accordance with the circumstances, most commonly vomiting, pain at the pit of the stomach, almost uniformly described as a burning pain, pain in the throat, were the symptoms; it might also attack the nervous system; in one case, instant death had been produced; it might produce diarrhea, though not always; it might produce swelling of parts of the body, or peculiarly anxious appearance of the countenance; death commonly ensues by the person being in a state of collapse; witness came to the conclusion, from observation, from the statements of standard authors, and from the analysis of two hundred cases of poisoning, recently made by Dr. Benjamin Lee. Witness exhibited the analyses of Dr. Lee in tabular statement. In cases of arsenical poisoning, the urine was scanty, and sometimes suppressed; the feces were usually soft, with a fetid odor."

William Detmoid, M. D., sworn.—"Witness was a physician and surgeon, and had been between thirty and forty-nine years, and was formerly professor in the Medical Department of the New York University; was familiar with symptoms of arsenical poisoning; they varied with the amount of the dose, the condition of the system, and other circumstances, which they could not appreciate; those which were almost invariably found were first, vomiting of the contents, afterward streaked with blood, an intense burning pain, beginning in the pit of the stomach and proceeding downward, making the whole of the abdomen painful; descended sometimes to the anus, and ascended to the throat sometimes; the burning pain was unquenchable; they had also diarrhea, sometimes streaked with blood, an anxious face and sunken eye, and in rare cases a brilliant look of the eye, excessive prostration of the vital powers, the pulse quick and feeble, and the limbs often paralyzed; the extremities became numb; the urine was in most cases very scanty, of a high color, and was sometimes entirely suppressed; the mind was generally free, and in rare cases was there delirium; this was to be remarked, because in other diseases having similar symptoms there was delirium; there was paralysis generally, but in some cases convulsions; witness had not mentioned all the symptoms which might occur in cases of arsenical poisoning, but had confined himself to those which were the ordinary symptoms.

The witness described the pain felt by persons poisoned by arsenic to be a fiery pain from the pit of the stomach, extending upward, with a sore mouth and lips, and extending downward to the orifice of the anus, so as to make the evacuation painful. In cases where death follows in a few days after a large dose being taken, the eyes might either have a wild, brilliant appearance, or be sunk deeply in the head, and frequently injected with blood; but in cases which were not so immediately fatal, and where death occurred in a week or two after repeated doses, the eyes were apt to be swollen; in the slower cases there is frequently edematous swelling of the lids, with pain in the eyes; at first, the color of

the vomited matter would depend much on the contents of the stomach, but after the stomach was emptied then the color would depend on the secretions, and the ejected masses would be yellow, with spots or streaks of blood; if there were a great deal of blood it might be much darker; the vomited matter might at times be of the color of coffee grounds; the patients are very frequently exceedingly restless, tossing their arms and hands about; very frequently there is numbness and loss of sensation, also paralysis or convulsive twitchings, showing that the nerves are affected; the manner of death varies according to the quantity taken; in most cases it occurs under collapse, (cold, clammy skin, weak pulse, etc.;) at times there is great lethargy when death approaches; great prostration is noticeable through the whole course of the disease; laudanum produced drowsiness and a contraction of the pupil, which in large doses becomes smaller; the patient becomes drowsy, and before death may have convulsions, together with coma; the respiration is very slow, and snoring,—a loud breathing, that can be heard; when medical men give over two drachms at a time, it is an exceptional case; three and a half ounces between nine A. M. and seven P. M., would certainly be a colossal dose; when arsenic is taken in successive small doses it will accumulate in the body more rapidly than it would be thrown out again; it is removed chiefly by the kidneys, and begins about the loins; but within twenty-four hours after the first dose there is reason to suppose that such removal goes on until the whole of the arsenic leaves the system, provided no new doses are introduced; arsenic would be eliminated more rapidly where the blood and all the functions performed their active duties, than when they move slowly; the dose thus supposed, must be a very small one; if 1-16th of a grain it is difficult to find minute particles, but in three days arsenic could not be found after one dose.

A dose of arsenic begins with 1-16th of a grain, which would be given only twice a day, and then the patient would be watched for poisonous symptoms, which occur sometimes after such doses,

and then it would cease to be medical; the effects of the medicinal doses of arsenic are slow, and those of laudanum very rapid; so that if a dose of arsenic and laudanum be given at the same time, the laudanum would be mainly noticed, while in larger doses of each it would be directly the reverse, and the doses of arsenic would be but slightly influenced by the laudanum, which would in a measure relieve the pains and partially stop the vomiting and diarrhea, but all these would be overpowered by the arsenic; the post mortem appearances of a case of arsenical poisoning are at first negative; thus, if death occurred rapidly and a rent was found in the stomach, they would not go further, and suspect poisoning; they generally find a slight inflammation extending through the intestines from the mouth to the anus, with black particles under the mucous membrane which could not be washed off; there might be abrasion of the skin in the intestines; in looking at these spots or patches by the microscope, probably blood would be found; had not much experience in anatomical matters, but arsenic is a preventive of putrefaction; in a great many cases, when a body poisoned by arsenic is exhumed, the body is found in a state of good preservation; the non-existence of those post mortem appearances described would prove nothing, but their existence would be proof positive; witness took his degree at Gottingen, in Germany. The suppression of the urine would make the arsenic more rapidly fatal."

Dr. B. Fordyce Barker, examined by Mr. Sedgwick, deposed.—"I reside at No. 70 Union-place; I am professor of Midwifery and Diseases of Women, in New York Medical College." The witness went on to describe the symptoms of acute poisoning to be vomiting, nausea, a burning in the throat, commonly called by patients "a ball of fire," gradually extending over the whole abdomen. Professor Barker gave testimony similar to that of Dr. Detmoid as to the symptoms and effects of poisoning by arsenic acid.

Mr. Benjamin W. Macready resides at No. 8 Ninth street; is one of the visiting physicians of Bellevue; as professor of toxi-

cology, he gave lectures on the subject of poisoning by arsenic; the witness detailed the symptoms which are manifested in a person suffering under the effects of poison; the testimony was, in effect, similar to that of the other medical witnesses.

Ques.—What would be the effect upon the human system of three ounces of laudanum, administered between a period of ten hours? (Objected to, and objection sustained.)

Ans.—The effect of that amount of laudanum on ninety-nine persons out of one hundred would be that the pulse would become slow, and in most cases the dose would be sufficient to produce death, and also a drowsiness out of which it would be difficult to awaken the patient. Patients suffering from lock-jaw, hydrophobia, etc., wherever there is acute pain, violent purging and certain diseases of the nervous system, large doses of laudanum can be borne. Never knew of a single disease or a combination of diseases which would produce the symptoms named in the present case. Arsenic is not a natural constituent of the human system, either before or after death. Would call a poisonous dose of arsenic one grain; it would produce unpleasant effects; there was evidence of a case where two grains had produced death.

Alanson S. Jones, physician, gave similar testimony as to the symptoms on a patient under the effects of poison; he also added that the disease most resembling poisoning by arsenic is Asiatic cholera; there was no Asiatic cholera in this city in 1857; the discharges are never accompanied with blood in Asiatic cholera; it does occasionally accompany the discharges in cases of poisoning; in colic the pain is removed by pressure, in poisoning it is increased by pressure.

Ques.—If you found in a human body two grains of arsenic, would you say that a greater amount had been administered?

Ans.—In my judgment there can be no doubt of that; a larger amount must have been introduced into the system, because arsenic produces vomiting, and more or less must be thrown off.

Dr. Adam Zenker, a graduate of the New York Medical Col-

lege; studied chemistry in Germany under Leibig and Wohler, and given particular attention to the study of poisons during the last eight years; sometimes in the laboratory they poison animals with arsenic and poisonous gases; sometimes the coroners sent them poisoned stomachs and intestines to examine. Dr. Zenker assisted in the post mortem examination, and the chemical analysis of the body of Mrs. Stephens, and testified that these investigations were conducted with great care and caution, as stated by preceding witnesses. He discovered metallic arsenic in the viscera taken from the body of Mrs. Stephens at the post mortem.

Dr. Bern L. Budd, another of Dr. Doremus's assistants, who had pursued the practical study of chemistry for seventeen years, corroborated the testimony of Dr. Doremus.

On Sunday, October 3d, he went to Bellevue Hospital with Dr. Doremus; separated the body of Mrs. Stephens from the lower extremities; placed the whole body in a trunk and conveyed it to the New York Medical College. Then the soft parts were removed from the bones, and the muscular and adipose tissues and the skin were separated, and distinct analyses were made. The doors of the laboratory were carefully secured and sealed. A portion of the tissues were analyzed at a laboratory expressly fitted up for the purpose in Eighteenth street.

Witness gave a detailed statement of the various processes and the precautions used to insure the purity of the materials used. In one case, being unable to procure pure nitrate of soda, they were obliged to make it.

From two pounds and two ounces of muscular tissue, scraped from the spine, they obtained, by a separate analysis, one-twenty-second part of a grain of arsenic. Arsenic was also obtained from the skin and bones, and from urine found in the bladder. Arsenic does not exist in the human body; they had proved this by the careful analysis of an entire human body, in the same manner in which they examined that of Mrs. Stephens. Had since analyzed drugs obtained from Shipley & Vanderhoof, similar

to those prescribed for Mrs. Stephens by her physicians, and they obtained no arsenic.

He had examined the subject of arsenic-eating, said to prevail in some countries, and came to the conclusion that it was all the fabulous fancy of travelers; the standard writers all discredited it, and an American physician who had traveled in Hungary and Styria had recently published a statement, that the whole story is without foundation. He had lately analyzed the entire coffin of Mrs. Stephens, and it contained no arsenic. The coffin-plate was exhibited in court."

In the able charge of Judge Roosevelt to the jury, in this case, he said of the Medical Evidence: "You have also heard from the lips of some of the most distinguished members of the medical profession,—all agreeing in the main features of their testimony,—what are the effects exhibited before death where arsenic has been taken in poisonous quantities, and which of those effects are peculiar to that one cause. On these statements, weighing them deliberately, it will be for you to determine, as one of the steps to your ultimate conclusion, whether the symptoms in the case before you were, in point of fact, the same substantially as those attendant on arsenious poisoning. Should the comparison, after the most careful study of every particular, still leave any doubt on the mind, you will then have the right, and it will be your duty, to look to another, and perhaps the most wonderful feature in this most remarkable case. Post mortem examinations, as generally understood, are dissections of the body made within a few hours, or, at furthest, days, after the death. In the instance of Mrs. Stephens, a whole year had elapsed. She died on the 23d of September, 1857, and was exhumed on the 23d of September, 1858. This long period of interment, so fatal in ordinary cases to both observation and experiment, has furnished, it is said, one of the strongest links in the chain of evidence to establish the fact that arsenious poison, howsoever and by whomsoever administered, was the true cause of the death in question. The body was in a state of preservation, to

be accounted for, says the chemists, by the known action of arsenic, and yielded, under the operation of probably the most perfect and careful analysis ever conducted by scientific men, a sufficient quantity of the poison to demonstrate that arsenic had been taken into the system before death, and that death resulted from it. I need not go over these admirable experiments, which so wonderfully illustrate the powers of science, and do much honor to Dr. Doremus and his associates. They have been almost repeated by description in the course of the trial, and must be fresh in your recollection. It will be for you to consider them candidly, and to give them as on a question of life and death, all the weight to which, in your deliberate judgment, making due allowance for possible error, they shall seem entitled."

The prisoner was convicted; but the case is still before the Court of Appeals, on important questions of law.

The foregoing report of the most interesting case of arsenical poisoning that has occurred in this country, is not as complete as we would desire. We have been obliged to rely on the report given to the daily New York papers.

The leading medical witness, Prof. Doremus, received from the State, we understand, $4,000, for his chemical analysis in this case. This is the most liberal compensation to a medical witness, on record, in this country; or, perhaps, any other.

The very able argument of Mr. Ashmead, for the State, has been published, and occupies ninety pages, octavo.

CHAPTER XXXVI.

POISONING BY STRYCHNIA.

THE celebrated Palmer case, in England, produced throughout the whole civilized world a profound alarm; illustrating as it did, the fact that strychnia, in the hands of one acquainted with its properties, might be used to produce death, and be detected only by the most profound skill of medical men.

The first case upon record, of importance, where strychnia was used, was that of Miss Abercromby, who was poisoned by her brother-in-law in 1830, in England. So crude however was the knowledge of the agent at that time, that Wainright, the murderer, escaped conviction, although there is, at this time, no doubt of his guilt, judging from the symptoms that attended the death of Miss Abercromby.

Poisoning by this article is constantly becoming more frequent; and the courts, counsel, and medical men, will doubtless soon have to deal with it, as often as with arsenic, in criminal matters.

Strychnia is an alkaloid, extracted from nux vomica, an eastern drug. It has not been much known and used as a poison, except by medical men, until recently, being discovered in 1818.

TAYLOR'S CHEMICAL ANALYSIS AND SYMPTOMS.

The pure alkaloid.—Strychnia is a white crystalline solid, scarcely soluble in water. It is dissolved by hot rectified spirit, and, in a smaller degree, by ether. Its alcoholic solution by slow evaporation deposits strychnia in well-formed crystals. 1. It crystallizes in lengthened cuneiform octahedra, which have been described as four-sided prisms, and in flattened prisms, crossing

each other at angles of 60°. 2. When heated on platina-foil or mica, it melts, and burns like a resin, with a yellow flame, evolving a black smoke. When heated in a small reduction-tube, ammonia is one of the products of its decomposition. 3. It requires 7000 parts of cold water and 2500 of boiling water to dissolve it. It is thus separated and known from its salts, all of which are very soluble in water. 4. It is not very soluble in potash, ammonia, or any alkali; hence an alkali gives a white precipitate in the saline solutions of strychnia, when they are not too much diluted. 5. It is very soluble in chloroform. 6. It is dissolved by weak acids, mineral and vegetable. 7. Strychnia and all its salts have an intensely bitter taste, even when they do not form more than the $\frac{1}{333333}$th part by weight of the solution. 8. Like the solutions of all the alkaloids, they are precipitated by tannic acid.

Tests in the solid state.—1. Nitric acid does not produce any change of color in pure strychnia or its salts; but the strychnia used in pharmacy is generally reddened by this acid, owing to its containing brucia. 2. Iodic acid produces no change in this alkaloid, whereby it is known from morphia. 3. Cold concentrated sulphuric acid dissolves it without producing any change of color. If to this solution, a fragment of a crystal of bichromate of potash is added and allowed to remain for a few seconds, a series of beautiful colors will appear wherever the bichromate meets the acid mixture. These colors commence with a deep blue, passing through violet, purple, and red tints, until by long exposure to the air, the mixture assumes a light-red color. A fragment of ferrocyanide of potassium, or a particle of peroxide of manganese, will produce the same play of colors. As they are produced by finely powdered peroxide of manganese (if not added in too large quantity), they present the finest variations of tint, while the changes are not so rapid. These results are obtained equally with the salts of strychnia. This "color-test" will apply to the smallest visible quantity of pure strychnia obtained by the evaporation of the smallest quantity of any of its

solutions. It should be applied, not to the solution, but to the dry residue; the proportion of acid and manganese or bichromate of potash must be adjusted accordingly.

Salts of strychnia in solution.—1. If not too diluted, potash and all alkalies throw down a white precipitate not redissolved by a slight excess of the alkali. 2. Carbonate of potash slowly precipitates a diluted solution in fine prisms. 3. Bicarbonate of potash does not precipitate the solution, if acid. 4. Sulphocyanide of potassium produces a crystalline precipitate, appearing as flattened prisms under the microscope. 5. Ammonia gives crystals of strychnia. 6. Chromate of potash produces in very diluted solutions, prismatic crystals of a golden-yellow color, and when a drop of sulphuric acid is added to these under the microscope, the purple and violet colors are immediately brought out. This is a useful test for strychnia, first suggested by Mr. Horsley, of Cheltenham. 7. The chlorides of platina and gold, and the iodide of potassium, with or without iodine, produce precipitates, the crystalline characters and polarizing properties of which, as observed by the miscroscope, are in some respects peculiar. The iodide of potassium gives, even in very diluted solutions, well-marked stellated prisms with fusiform terminations. 8. The solution has an intensely bitter taste, perceptible even when diluted to $\frac{1}{30000}$th part, or according to some, when diluted to $\frac{1}{70000}$th part.

Objections to the tests.—There are no objections to these tests when we are dealing with the *pure alkaloid*, and when we take care that the more salient properties of crystallization and taste are brought out as well as the production of color. Some enthusiastic chemists have proposed that we should rely on color alone, and they have affirmed that there is no substance but strychnia which will produce, with a mixture of sulphuric acid and bichromate of potash, ferricyanide of potassium, or peroxide of lead, the colors above described. This was stated on oath by the chemical witnesses for the defense on the trial of William Palmer, in 1856. The researches of Bernard and Pelikau, published in

1857, have, however, made known to the scientific world that the South American poison, curara, contains an alkaloid, curarina, which resembles strychnia in the action of the color tests, brucia in the action of nitric acid, and both in its intense bitterness. Sulphuric acid gives a variety of colors with organic substances. Narceine and papaverine are rendered by it blue; salicine acquires a pinkish-red; pyroxanthine, a rich sapphire-blue color, with various shades of purple; cyclamine, a violet-red color; and cerebral matter, a violet color with various shades of red. But these substances are colored by sulphuric acid irrespective of the use of bichromate of potash, or the other oxidizing agents. Aniline acquires a deep sapphire-blue color when a mixture of sulphuric acid and bichromate of potash is added to it. In all these cases, it is true, a distinction may be drawn, provided the acid and the bichromate be separately added, and not used in a mixed state, as recommended by Otto and some other analysts; yet the fact that such a variety of colors is produced by sulphuric acid on organic substances should teach caution in drawing inferences from its employment in cases in which we are operating on the solids or liquids of a dead body. On the whole, in Medico-legal practice, it would be unsafe to rely upon color thus produced in organic extracts, unless we have the corroboration derived from crystalline form and bitter taste. In the absence of the latter, whatever results the color test may give, there can be no certainty that strychnia is present.

A negative result must be received also with equal caution. Böcker has pointed out that morphia, quinia, certain organic acids, nitre, common salt, and sugar, modify or prevent the reaction of chromic acid on strychnia. An analyst ought therefore to be well assured of the purity of the substance which he is examining before he comes to a conclusion that strychnia is present or absent in an article presented for analysis.

Organic mixtures.—Numerous processes have been suggested for the detection of this poison in the contents of the stomach and in organic liquids generally. It is unnecessary to describe

the whole of them. The general principle of separation is nearly the same in all. The alkaloid is first rendered soluble by the use of a diluted acid,—the tartaric, oxalic, acetic, sulphuric, hydrochloric, and phosphoric have all been used for this purpose. The alkaloid is then precipitated by carbonate of potash, and redissolved in alcohol mixed with acetic acid; or, after concentration, the acid liquid is neutralized by potash or its carbonate, and the alkaloid removed by ether; or lastly, the salt of strychnia is removed from the organic liquid by agitating it with animal charcoal, and it is then separated from the charcoal by rectified spirit. Among these processes, that which is least open to objection is based on the principle first suggested by M. Stas. 1. A small quantity of acetic acid (a few drops to an ounce) is added to the liquid or to the solid very finely cut up. A sufficient quantity of water is used to make a thin liquid, a small quantity of alcohol is added, and the whole is now digested in a water-bath, with frequent stirring. 2. After an hour's digestion, the liquid is strained, filtered, and pressed; the residue is washed with more water and alcohol until all the soluble matter is removed. The liquid is evaporated in a water-bath to one-half, and the residue is then treated with hot alcohol and filtered. 3. The alcoholic solution (containing acetate of strychnia) is evaporated, and the residue is digested with a small quantity of distilled water. This is filtered, and placed in a stoppered tube; it is then rendered alkaline by potash, and shaken with twice its volume of rectified ether. The ethereal liquid is poured off and allowed to evaporate spontaneously, when strychnia, if present, will be left in small circular spots, which appear crystalline under the microscope. The crystalline form, the bitter taste, and the effect produced by sulphuric acid and bichromate of potash, will enable the analyst to determine whether the ethereal residue does or does not contain the alkaloid strychnia.[1]

Symptoms.—When strychnia is taken in solution it has a hot

[1] Taylor on Poisons, 689—693.

and intensely bitter *taste*. This, of course, is not necessarily perceived when it is swallowed in the form of a pill. At an interval varying from a few minutes to an hour or longer, and sometimes without any premonitory symptoms, the person is suddenly seized with a feeling of suffocation and great difficulty of breathing. There are twitchings and jerkings of the head and limbs,—a shuddering or trembling of the whole frame. Tetanic convulsions then commence suddenly with great violence, and nearly all the muscles of the body are simultaneously affected. The limbs are stretched out, the hands clenched,—the head, after some convulsive jerkings, is bent backward, the whole body is as stiff as a board,—and assumes, by increase of the convulsions, a bow-like form, (episthotonos,) being arched in the back and resting on the head and heels. During the fit the head is firmly bent backward, and the soles of the feet are incurvated or arched and everted. The abdomen is hard and tense,—the chest spasmodically fixed,—so that respiration appears to be arrested,—the face assumes a dusky or congested appearance, with a drawn and anxious aspect, the eyeballs are prominent and staring, and the lips are livid. The features have been observed to assume the peculiar appearance given by the sardonic grin, (risus sardonicus.) The patient complains of a choking sensation, with thirst and dryness of the throat. An attempt to drink is often accompanied with a spasmodic closure of the jaws, by which the glass or vessel is broken or bitten. In several cases of poisoning by strychnia there has been from the outset a sense of impending dissolution, and one of the first exclamations made by the patient has been, "I shall die." The intellect is generally clear and unclouded during the intervals of paroxysms, and the patient appears to have a full sense of his danger. After a succession of fits and generally shortly before death, there may be a loss of consciousness. This was observed in a case which occurred to Dr. Ogston, and in that of Mrs. Dove. Pain is occasionally felt at the pit of the stomach, and during the paroxysms there is severe suffering from the violent spasms of the voluntary muscles.

The consciousness of the access of the fit is very remarkable. The patient calls out loudly, "It is coming," and screams or shrieks, asking at the same time to be held. He in vain seeks for relief in gasping for air and in requiring to be turned over, moved, or held. Sometimes there is frothing at the mouth, and this froth is bloody from injury to the tongue. With respect to the muscles of the lower jaw,—these, which are the first to be affected in tetanus from disease, are generally the last to be affected by the poison. The jaw is not primarily attacked, and is not always fixed during the paroxysm. It is relaxed in the interval, and the patient can frequently speak and swallow. When the jaw has been fixed by spasm, unlike the lock-jaw of disease, this has come on suddenly in full intensity, with tetanic spasms in other parts, and there are intermissions which are not witnessed in the tetanus of disease. The sudden and universal convulsion affecting the voluntary muscles has been sometimes so violent that the patient has been raised up and even jerked off the bed. During the convulsions the pulse is very quick. After an interval of half a minute to one or two minutes, the convulsions subside; there is an intermission,—the patient feels exhausted and is sometimes bathed in perspiration. It has been noticed in some of these cases that the pupils were dilated during the paroxysm, while in the intermission they were contracted. Slight causes, such as the attempt to move, or a sudden disturbance, or even touching the person lightly, will frequently bring on a recurrence of the convulsions. In cases likely to prove fatal, they rapidly succeed each other and increase in severity and duration, until at length the patient dies exhausted. The tetanic symptoms produced by strychnia, when once clearly established, progress rapidly either to death or recovery. The duration of the case, when the symptoms have set in, is reckoned by minutes, while in the tetanus of disease when fatal, it is reckoned by hours, days, and even weeks. As a general statement of the course of these cases of poisoning,—within *two hours* from the commencement of the symptoms the person either dies or recovers, accord-

ing to the severity of the paroxysms and the strength of his constitution."[1]

As to detecting the poison in the body after death, the following points, Mr. Taylor thinks, are established: "1. That strychnia may be found in the stomach as in other cases of poisoning, when it has not been entirely absorbed, and the stomach and contents have been properly preserved for analysis. 2. That a putrefied condition of the body does not interfere with its detection and separation when present in the remains. 3. That in some cases, when given in small doses, and in other cases, even in large doses, although it may be detected in the stomach, (if carefully preserved,) it can not be detected in the absorbed state. in the blood and tissues. 4. That there are no facts derived from experiments on animals, or from observations on the human body, to justify the statement, that in *all* cases of poisoning by strychnia, the poison must by proper chemical processes be certainly detected. 5. That in strychnia poisoning, as in morphia and other forms of poisoning, a person may live a sufficient time for the poison to be entirely removed from the stomach, and in this case he may die without a trace of strychnia being found in the blood, tissues, or any part of the body."[2]

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[1] Taylor on Poisons, 681–682.

[2] Idem, 695.

CHAPTER XXXVII.

TESTIMONY OF CURLING, TODD, BRODIE, CHRISTISON AND TAYLOR, IN THE PALMER CASE.

THERE is very great danger that the symptoms of convulsions resulting from a poisonous dose of strychnine, may be mistaken for genuine tetanus. This has doubtless sometimes happened, as in the case of Miss Abercromby.

On the trial of Palmer, the defense took the grounds, that the convulsions testified to as existing, before Cook died, were either idiopathic or traumatic tetanus, and not the effect of strychnine poisoning.

The most distinguished physicians and chemists of England and Scotland were present and testified on this point. Among them were Curling, Todd, Brodie, Christison, Taylor and Solly. Their testimony so clearly, and definitely settles the peculiar characteristics of the different forms of tetanus, we give it from a pamphlet report of the Palmer case, published by the London Times.

Dr. Curling, surgeon to the London Hospital, and author of a work upon tetanus, testified as follows: "Tetanus means a spasmodic affection of the voluntary muscles. Of true tetanus there are only two descriptions,—idiopathic and traumatic. There are other diseases in which we see contractions of the muscles, but we should not call them tetanus. Idiopathic tetanus is apparently self-generated; traumatic proceeds from a wound or sore. Idiopathic tetanus arises from exposure to damp or cold, or from the irritation of worms in the alimentary canal. It is not a disease of frequent occurrence. I have never seen a case of idiopatic tetanus, although I have been surgeon to the London Hospital

for twenty-two years. Cases of traumatic tetanus are much more frequent. Speaking quite within compass, I have seen fifty cases. I believe one hundred would be nearer the mark. The disease first manifests itself by suffering about the jaws and back of the neck. Rigidity of the muscles of the abdomen afterward sets in. A dragging pain at the pit of the stomach is an almost constant attendant. In many instances the muscles of the back are extensively affected. These symptoms, though continuous, are liable to aggravations into paroxysms. As the disease goes on, these paroxysms become more frequent and more severe. When they occur, the body is drawn backward; in some instances, though less frequently, it is bent forward. A difficulty of swallowing is a very common symptom, and also a difficulty of breathing during the paroxysm. The disease may, if fatal, end in two ways. The patient may die somewhat suddenly from suffocation, owing to the closure of the opening of the windpipe; or he may be worn out by the severe and painful spasms; the muscles may relax, and the patient gradually sink and die. The disease is generally fatal. The locking of the jaw is an almost constant symptom attending traumatic tetanus,—I may say a constant symptom. It is not always strongly marked, but generally so. It is an early symptom. Another symptom is a peculiar expression of the countenance.

To Lord Campbell.—I believe this is not peculiar to traumatic tetanus, but my observation is taken from such cases.

Witness.—There is a contraction of the eyelids, a raising of the angles of the mouth and contraction of the brow. In traumatic tetanus the lower extremities are sometimes affected, and sometimes, but somewhat rarely, the upper ones. When the muscles of the extremities are affected, the time at which that occurs varies. If there is no wound in the arms or legs, the extremities are generally not affected until late in the progress of the disease. I never knew or read of traumatic tetanus being produced by a sore throat or by a chancre. In my opinion a syphilitic sore would not produce tetanus. I know of no instance

where a syphilitic sore has led to tetanus. I should think it an unlikely cause. The time in which traumatic tetanus causes death varies from twenty-four hours to three or four days, or longer. The shortest period that ever came to my knowledge was eight or ten hours. The disease when once commenced, is continuous.

Attorney-General.—Did you ever know of a case in which a man was attacked one day, had twenty-four hours' respite, and was then attacked the next day?—Never. I should say that such a case could not occur.

Attorney-General.—You have heard the account given by Mr. Jones of the death of the deceased;—were the symptoms there consistent with any forms of traumatic tetanus that has ever come under your observation?—No.

Attorney-General.—What distinguishes it from such cases?—The sudden onset of the disease. In all cases which have come under my notice, the disease was preceeded by the milder symptoms of tetanus, gradually proceeding to the complete development.

Attorney-General.—Were the symptoms described by the woman, Mills, as being present on Monday night, those of tetanus?—No; not of the tetanus of disease.

Attorney-General.—There was not, in your opinion, either idiopathic or traumatic tetanus?—No.—Why are you of that opinion?—The sudden onset of the spasms and their rapid subsidence, are consistent with neither of the two forms of tetanus.

Attorney-General.—Is there not what is called hysteric tetanus?—Yes. It is rather hysteria combined with spasms, but is sometimes called hysteric tetanus. I have known of no instance of its proving fatal, or of it occurring to a man. Some poisons will produce tetanus. Nux vomica, acting through its poisons, strychnine and brucia, poisons of a cognate character, produce that effect. I never saw a case of either human or animal life destroyed by strychnine."

Dr. Todd, physician at King's College Hospital, having held

that office twenty years, and author of a work on physiology, testified, that he agreed with Dr. Curling in his distinction between idiopathic and traumatic tetanus. He said: "I have seen two cases of what appeared to me to be idiopathic tetanus, but such cases are rare in this country. I define idiopathic tetanus to be that form of the disease which is produced without external wound, apparently from internal causes,—from constitutional causes. In my opinion, the term, tetanus, ought not to be applied to disease produced by poisons, but I should call the symptoms tetanic, in order to distinguish the character of the convulsions. I have observed cases of traumatic tetanus. Except that in all such cases there is some lesion, the symptoms are precisely the same as those of idiopathic tetanus. The disease begins with stiffness of the jaw. The symptoms gradually develop themselves, and extend to the muscles of the trunk. When the disease has begun, there are remissions, but they are not complete; only a diminution of the severity of the symptoms, not a total subsidence. The patient does not express himself as completely, only quite comfortable. I speak from my own experience. As to time, the cases may be divided into two classes. Acute cases will terminate in three or four days, chronic cases will go on as long as from nineteen to twenty-two or twenty-three days, and perhaps longer. I do not think I have known a case where death occurred within four days; cases are reported in which it occurred in a shorter period. In tetanus the extremities are affected, but not so much as the trunk. Their affection is a late symptom. The locking of the jaw is an early one. Sometimes the convulsions, epilepsy, assume somewhat of a tetanic character, but they are essentially distinct from tetanus. In epilepsy the patient always loses consciousness. Apoplexy never produces tetanic convulsions. Perhaps I may be allowed to say, that when there is effusion of blood upon the brain, and a portion of the brain is involved, the muscles may be thrown into short tetanic convulsions. In such cases the consciousness would be destroyed. Having heard described the symptoms attending the

death of the deceased, and the post mortem examination, I am of opinion that in this case there was neither apoplexy nor epilepsy. I never knew tetanus arise either from syphilitic sores or from sore throat. There are poisons which will produce tetanic convulsions. The principle of those poisons are nux vomica, and those which contain, as their active ingredients, strychnine, and brucia, I should not like to give to a human subject a quarter of a grain. I think that it is not unlikely that half a grain might destroy life; and I believe that a grain certainly would. I think that half a grain would kill a cat. The symptoms which would ensue upon the administration of strychnine when given in solution,—and I believe that poisons of that nature act more rapidly in a state of solution than in any other form,—would develop themselves in ten minutes after it was taken, if the dose were a large one; if not so large, it might be half an hour before they appeared. Those symptoms would be tetanic convulsions of the muscles, more especially those of the spine and neck; the head and back would be bent back, and the trunk would be bowed in a marked manner; the extremities also would be stiffened and jerked out. The stiffness, once set in, would never entirely disappear; but fresh paroxysms would set in, and the jerking rigidity would reappear; and death would probably ensue in a quarter of an hour or so. The difference between tetanus produced by strychnine and other tetanus is very marked. In the former case the duration of the symptoms is very short, and instead of being continuous in their development, they will subside if the dose has not been strong enough to produce death, and will be renewed in fresh paroxysms; whereas, in other descriptions of tetanus, the symptoms commence in a mild form, and become stronger and more violent as the disease progresses. The difficulty experienced in breathing is common alike to tetanus, properly so called, and to tetanic convulsions occasioned by strychnine, arising from the pressure upon the respiratory muscles. I think it was remarkable that the deceased was able to swallow, and that there was no fixing of the jaw, which would have been

the case with tetanus proper, resulting either from a wound or from disease. From all the evidence I have heard, I think that the symptoms which presented themselves in the case of Mr. Cook, arose from tetanus produced by strychnine. I do not agree with Dr. Taylor, or the authorities, in the opinion, that in cases of tetanus, animals died asphyxiated. If they did, we should invariably have the right side of the heart full of blood, which is not the case. I think that the term, asphyxiated, or suffocated, is often very loosely used. I know from my reading that morphia sometimes produces convulsions; but I believe that they would be of an epileptic character. I think that the symptoms from morphia would be longer deferred in making their appearance than from strychnine, but I can not speak positively on the point. Morphia, like strychnia, is a vegetable poison. I have not observed in animals the jaw fixed after the administration of strychnine."

Sir Benjamin Brodie testified as follows: "I have been for many years senior surgeon to St. George's Hospital, and have had considerable experience as a surgeon. In the course of my practice I have had under my care many cases of death from tetanus. Death from idiopathic tetanus is, according to my experience, very rare in this country. The ordinary tetanus in this country is traumatic tetanus. I have heard the symptoms which accompanied the death of Mr. Cook, and I am of opinion that so far as there was a general contraction of the muscles they resembled those of traumatic tetanus; but as to the course those symptoms took, they were entirely different. I have attended to the detailed description of the attack suffered by Mr. Cook on the Monday night, its ceasing on Tuesday, and its renewal on the Tuesday night. The symptoms of traumatic tetanus always begin, so far as I have seen, very gradually, the stiffness of the lower jaw being, I believe, invariably, the symptom first complained of,—at least, so it has been in my experience. The contraction of the muscles of the back is always a later symptom,—generally much later. The muscles of the extremities are affected

in a much less degree than those of the neck and trunk, except in some cases where the injury has been in the limb, and an early symptom has been spasmodic contraction of the muscles of the limb. I do not myself recollect a case of ordinary tetanus, in which occurred that contraction in the muscles of the hand, which I understand was stated to have taken place in this instance. Again, ordinary tetanus rarely runs its course in less than two or three days, and often is protracted to a much longer period. I knew one case only in which the disease was said to have terminated in so short a time as twelve hours; but probably in that case the early symptoms had been overlooked. Again, I never knew the symptoms of ordinary tetanus to last for a few minutes and then subside, and then come on again after twenty-four hours. I think that these are the principal points of difference which I perceive between the symptoms of ordinary tetanus and those which I have heard described in this case. I have not witnessed tetanic convulsions from strychnine on animal life. I do not believe that death, in the case of Mr. Cook, arose from what we ordinarily call tetanus,—either idiopathic or traumatic. I never knew tetanus result from sore throat or from chancre, or any other form of syphilitic disease. The symptoms were not the result either of apoplexy or epilepsy. Perhaps I had better say at once I never saw a case in which the symptoms that I have heard described here, arose from any disease. When I say that, of course I refer to no particular symptoms, but to the general course which the symptoms took."

Professor Christison testified as follows: "I am fellow of the Royal College of Physicians, and Professor of Materia Medica to the University of Edinburgh: I am also author of a work on the subject of poisons, and I have directed a good deal of my attention to strychnia. In my opinion, it acts by absorption into the blood, and through that upon the nervous system. I have seen its effect on a human subject, but not a fatal case. I have seen it tried upon pigs, rabbits, cats, and one wild boar. I first directed my attention to the poison in 1820, in Paris. It had been

discovered two years before in Paris. In most of my experiments upon animals, I gave very small doses,—a sixth of a grain; but I once administered a grain. I can not say how small a dose would cause the death of an animal by administration into the stomach. I generally applied it by injection through an incision in the cavity of the chest. A sixth part of a grain so administered killed a dog in two minutes. I once administered to a rabbit, through the stomach, a dose of a grain. I saw Dr. Taylor administer three-quarters of a grain to a rabbit, and it was all swallowed except a very small quantity. The symptoms are nearly the same in rabbits, cats, and dogs. The first is a slight tremor and unwillingness to move; then frequently the animal jerks its head back slightly; soon after that all the symptoms of tetanus come on, which have so often been described by the previous witnesses. When the poison is administered by the stomach, death generally takes place between a period of five minutes and five-and-twenty minutes after the symptoms first make their appearance. I have frequently opened the bodies of animals thus killed, and have never been able to trace any effect of the poison upon the stomach or intestines, or upon the spinal cord or brain, that I could attribute satisfactorially to the poison. The heart of the animal generally contained blood in all cases in which I have been concerned. In the case of the wild boar, the poison was injected into the chest. A third of a grain was all that was used, and in ten minutes the symptoms began to show themselves. If strychnia is administered in the form of a pill, it might be mixed with other ingredients that would protract the period of its operation. This would be the case if it were mixed with resinous materials, or materials that were difficult of digestion, and such materials would be within the knowledge of any medical man, and they are frequently used for the purpose of making ordinary pills. Absorption in such a case would not commence until the pill was broken down by the process of digestion. In the present state of our knowledge of the subject, I do not think it is possible to fix the precise time when the operation of

the poison commences on a human subject. In the case of an animal we take care that it is fasting, and we mix the poison with ingredients that are readily soluble, and every circumstance favorable for the development of the poison. I have seen many cases of tetanus arising from wounds and other causes. The general symptoms of the disorder very nearly resemble each other, and in all the natural forms of tetanus the symptoms begin and advance much more slowly, and they prove fatal much more slowly, and there is no intermission in certain forms of natural tetanus. In tetanus from strychnia there are short intermissions.

I have heard the evidence of what took place at the Talbot Arms on the Monday and Tuesday, and it induces me to come to the conclusion that the symptoms exhibited by the deceased were only attributable to strychnia, or the four poisons containing it. There is no natural disease of any description that I am acquainted with to which I could refer these symptoms. In cases of tetanus consciousness remains to the very last moment. When death takes place in a human subject by spasm, it tends to empty the heart of blood. When death is the consequence of the administration of strychnia, if the quantity is small I should not expect to find any trace in the body after death. If there was an excess of quantity more than was required to cause the death by absorption, I should expect to find that excess in the stomach. The color tests for the detection of the presence of strychnine are uncertain. Vegetable poisons are more difficult of detection than mineral ones, and there is one poison with which I am acquainted, for which no known test has been discovered, and that is strychnia. The stomach of the deceased was sent in a very unsatisfactory state for examination, and there must have been a considerable quantity of strychnine in the stomach to have enabled any one to detect its presence under such circumstances."

The examination of Dr. Taylor was lengthy, and the substance of it is given in the extract we make from his book on this subject. He was handled roughly in the cross-examination, but sustained himself well.

This Palmer trial being the leading case upon strychnine poisoning, and being the one that has awakened courts to the dangers of this form of poisoning, we give an abstract of the trial as we find it in the work of Mr. Taylor. Being an important witness in the case, he has given an interesting account of it, which will be found in the next chapter.

This case should be thoroughly studied, by the medical witness, and by the lawyer. The distinctive features characterising genuine tetanus, and the effect of strychnia upon the system, are nowhere else so clearly and ably set forth. The medical witnesses, many of them, are at the head of their profession. It will be referred to as authority in all cases of this kind, in this country.

CHAPTER XXXVIII.

LEADING ADJUDICATED CASES IN POISONING BY STRYCHNIA.

REG. *v.* WILLIAM PALMER, Cent. Crim. Court; Taylor, 697.

THE prisoner was indicted for the murder of his friend, John Parsons Cook, by strychnia, and, after a lengthened trial, was found guilty of the crime. Whether we view the social position of the accused, the enormity of the crime, the stealthy and artful manner in which it was perpetrated, and the unscrupulous efforts made by some professional men to save this notorious criminal from the scaffold, this case surpasses all others in ancient or modern records. The deceased, æt. 28, enjoyed good health, had never been subject to fits and convulsions, and was fond of out-door sports. On the evening of the 14th November, 1855, while in the society of Palmer, he was first seized with a violent vomiting after drinking some brandy and water. From this illness he recovered, but he had repeated attacks of vomiting after taking various articles of food, until his death, on the night of November 20th. During this time, Palmer was daily with him, and sent him broth, which caused vomiting. Some of this broth had been privately taken by a servant before delivering it to deceased, and it caused her to vomit. The vomiting continued more or less daily after deceased had taken various articles of food, except on November 19th, on which day the prisoner was absent. On the 17th November an aged practitioner, (Bamford) was called in by Palmer to attend Cook. On the 18th, Palmer wrote to a medical friend of deceased's (Jones) to come and see him, stating what, as a medical man, he must have known to be untrue, that he was laboring under a bilious attack combined with

diarrhea. Bamford prescribed two pills containing calomel, rhubarb, and half a grain of the acetate of morphia, to be taken at night. They were taken by deceased on the nights of the 17th and 18th, with benefit. On the night of the 19th, at about half-past ten o'clock, Palmer gave to deceased two pills, and left him. At a quarter before twelve, the deceased was heard to scream, and he was then seen by a servant sitting up in the bed and beating the bed. He said to this witness, that the pills which had been given to him by Palmer had caused his illness. She thus described his symptoms: his head was in motion, jerking backward; his arms were straightened out, and his legs were quite stiff; the eyes were starting; the head was drawn back; the mouth closed. He could speak, and he said he should die. The prisoner, who had been sent for at the request of deceased, gave him a wine-glassful of a brown liquid, after which he vomited, and asked to have his hands rubbed. These were stiff, cold and damp. On November 20th Palmer was with him, and gave him coffee, which he vomited. Jones arrived, and saw him in consultation with Bamford and Palmer in the evening; he was then going on satisfactorily. He refused to take more pills, but it was agreed that he should have the morphia pills that night. The prisoner, Palmer, did not inform either Jones or Bamford, that deceased had been attacked with tetanic spasms on the previous night after having taken pills, and that he, the prisoner, had attended him, and sat with him for several hours. On the night of the 20th, Palmer called on Bamford for the pills: on the previous night they had been sent by a messenger. Bamford made them up in Palmer's presence, and at *his* request wrote a direction on the box, "night-pills," and delivered them to Palmer, who took them with him. Bamford did not again see the deceased alive.

About a quarter past eleven on this night (and about an hour after the pills had been delivered to him by Bamford,) the prisoner, Palmer, gave two pills to deceased in the presence of Jones, calling Jones's attention to Bamford's handwriting on the box. Palmer then left the house. Deceased, fearing an attack like

that of the preceding night, requested Jones to have a bed made up, so that he might sleep in the room with him. But for this circumstance, on which the prisoner had not calculated, it is probable that deceased would have been found dead in his bed, and no accurate history of the symptoms preceding death would have been made known. Three-quarters of an hour after taking the pills deceased appeared comfortable, but in ten minutes more (fifty-five minutes after taking them) Jones was suddenly roused by deceased, who was sitting up in bed, said he was going to be ill, asked his friend to rub his neck, and to send for Palmer. After swallowing two other pills (said to contain ammonia,) which Palmer had brought with him, deceased fell back on the bed in convulsions. He said he should be suffocated. They tried to raise him, but he was so stiffened out with spasms that it was impossible. He then said, "Turn me over." He was turned on his side, and he died in a few minutes. Jones described the symptoms as those of tetanus; every muscle of the body was stiffened. When his neck was rubbed, the muscles of the head and neck were found to be affected with violent spasms; his head was thrown back; his hands were clenched; and his arms were in a state of rigidity. His jaw was fixed and closed. His body was stretched out, and rested on the head and heels (opisthotonos.) The symptoms, therefore, in this second and fatal attack, came on in about an hour after deceased had taken the suspected pills, and he died in from sixteen to twenty minutes after their commencement.

The body of the deceased was inspected on the 26th November, six days after death; it was then in a state of rigid spasm, and this state of spasm continued in the limbs for more than two months after death, *i. e.* when the body was exhumed for a second inspection. The viscera were stated to be universally in a sound and healthy condition. The membranes of the brain were a little congested, the heart was empty, and the blood generally dark and fluid. The mucous membrane of the stomach, as well as that of the intestines, was partially congested. There was no appearance of any disease to account for death.

The stomach and intestines were delivered in a jar to Dr. Rees and myself for analysis, without any other information than that it was suspected the deceased might have died from poison. We could procure no history of the symptoms preceding death. As there has been much misrepresentation regarding the condition of the articles for analysis, I here give parenthetically the facts.

Dr. Rees and I made an examination of the coats of the stomach and of the coats and contents of the bowels. The only poison found in these and other organs was antimony in traces, and this discovery at once explained the cause of the vomiting from which deceased had suffered during his illness. No antimony had been prescribed for him by his medical attendant.

As there were no contents of the stomach discoverable in the jar, we examined the coats for various poisons,—among others for strychnia,—by the process known as that of Merck, and described by Fresenius. We preferred this process for its simplicity, and although not so delicate as that of Stas, yet it has this advantage: it separates strychnia (if present) in a form to leave no doubt upon the mind. It was this process which was used by Dr. Ogston in his case, and by Mr. Morley subsequently, in the case of Dove. It has been ignorantly attacked by those who for a time had a personal interest in attacking it, and who would have equally attacked any process whatever that Dr. Rees and I had adopted. We found no bitter taste in the alcoholic extract, and no satisfactory indication of the presence of strychnia. The charcoal process of Graham equally failed to show the presence of the poison. There was an effect produced by one color test, which would probably have satisfied some ardent chemist of the undoubted presence of strychnia. We, however, declined to risk the possible conviction of a man for murder upon so slender a piece of evidence as this. When we were at length furnished with an account of the symptoms under which deceased had died, we did not hesitate to refer death to strychnia, in spite of these equivocal chemical results: and this opinion was subsequently

confirmed at the trial by the evidence of some of the most eminent pathologists and physiologists of the day, including Brodie, Todd, Christison, Curling, Solly, and others.

It may be sufficient to state that the moral evidence against the prisoner was of the strongest possible kind. He had been associated with the deceased in various money transactions connected with racing, to such an extent that the death of the deceased had become, at that time, a necessity to him, in order, as he thought, to extricate himself from his difficulties.

The Medical Evidence for the prosecution was to the effect that viewing the symptoms as a whole in the two attacks, they were unlike any known form of disease, and admitted of no reasonable explanation, except that of death from strychnia. It was proved that the prisoner had secretly possessed himself of three grains of strychnia on the night of the 19th November, shortly before he gave to deceased the pills which led to the first attack, and that on the 20th, the day of deceased's death, he had procured six grains of strychnia at a druggist's shop. No reasonable motive could be suggested for his procuring nine grains of this poison from two different sources within twenty-four hours, or any explanation given of what had become of it. The prisoner had, therefore, the motive, the means, and the opportunity, of perpetrating the crime, while death by suicide or accident was wholly inconsistent with the facts.

The defense turned mainly on the non-discovery of strychnia in the body. The criminal tampering with the stomach, was conveniently ignored: and it was assumed that no difficulties had been placed in the way of the analysis. With this assumption it was alleged that no person can die of poison unless the poison is found in the dead body, and that strychnia being susceptible of detection up to the minutest fractional part of a grain, its absence, under a proper chemical research, was a proof that deceased could not have died from its effects. To support this view, the counsel for the defense called Mr. Herapath and Dr. Letheby, who asserted their power to detect strychnia up to the

one fifty-thousandth part of a grain or less! But while these witnesses, by their chemical evidence, were thus leading the jury to believe that the deceased had *not* died from strychnia, because it was not found in the *coats* of his stomach and intestines, they each had a mental reservation to the effect, that the non-detection was not really owing to the absence of the poison, but to the alleged imperfect process pursued by the crown witnesses for its separation! Mr. Herapath had, indeed, expressed this opinion openly on various occasions before the trial, and Dr. Letheby subsequently published his views to the same effect. If these witnesses had only candidly stated this at the trial, it would have saved the court and jury much time, and science much scandal; for they appeared to differ from the crown witnesses on the main fact, namely, the *cause of death*, when the difference in reality was as to the relative value of their own and other processes for the detection of strychnia,—a point which a jury could not decide, and which was quite unimportant to the issue.

The state in which the stomach was delivered for analysis would to most scientific persons have alone sufficed to account for the failure of the chemical evidence; but it was impossible to look for any charitable consideration from men who were bent on making a trial for murder a scene of personal contention and rivalry. Had even the stomach and its contents been delivered to us in an entire state, and the poison not found, the medical dogma on which the defense was based is utterly false. In nearly every chapter on every poison in this volume, the reader will find that chemistry has in some cases completely failed to reveal the presence of poison, while in others it has misled an "expert" to swear to the presence of poison in a definite quantity in a dead body when the whole was a fiction of the imagination.

The evidence for the defense had this bearing. If strychnia had been found in the stomach the death of the deceased would have been at once explained; hence the symptoms taken as a whole were certainly not inconsistent with poisoning. This in fact was admitted by more than one witness for the defense. It

was suggested that the symptoms were too long a time in appearing, to have been dependent on the pills,—a suggestion utterly at variance with facts,—also that the deceased if suffering from the effects of strychnia poisoning could not have borne to be rubbed, and that the cavities of the heart after death would not have been found empty. These statements are all contrary to fact. In short, no natural form of disease could explain the symptoms or death of Cook; and when closely examined, there was not a single incident in the case which was not reconcilable with death from strychnia. The possession of the poison, and the moral circumstances were conclusive of the guilt of the prisoner, while the only point that might have created doubt,—the non-discovery of poison,—admits of explanation either on the theory of the prosecution or on that of the defense.

On the theory of the chemical witness for the defense, a sufficiently delicate chemical process had not been pursued, while on the theory of those for the prosecution, the criminal Palmer and his friend Newton had either ignorantly or designedly destroyed the stomach and its contents, so as to render the detection of a small residuary quantity of this poison impossible. But the view of the witnesses for the defense, when taken with the Medical Evidence, fully justified the verdict of the jury. A criminal is not to be acquitted upon the assumption that a more delicate chemical process might have been adopted by the crown witnesses for the detection of poison in a dead body; for there is not a criminal case in which an unscrupulous solicitor might not procure this kind of evidence of opinion in favor of the most accomplished professional poisoner. There are various methods of arriving at the same chemical result, and every analyst thinks his own process the best. In fact, the chemical witnesses for the defense differed among themselves as to the best process for extracting strychnia; and they only agreed, *pro hâc vice*, in condemning that which was adopted by the crown witnesses! The jury meanwhile decided the case on the common-sense principle, that evidence based on the 50,000th of a grain of something

said to be strychnia by one or two chemists, could not materially add to the value of the evidence from symptoms. Either the symptoms were safe for their guidance without this refined arithmetical addition, or they were not. If they were not safe without it, they could hardly have acquired safety with it, especially when it is considered that the most confident of chemical witnesses are liable to be deceived by the results of their tests.

That the prisoner was guilty of the foul crime of murdering his friend, no one who views the whole case apart from prejudice can entertain a reasonable doubt. A distinguished German writer who has commented on this trial, expresses his astonishment that any professional men could be found in England who could stand forward and publicly state on oath that the symptoms under which Cook died might be explained by any form of nervous disease, epilepsy, or angina pectoris. It argues but little for the knowledge or moral feelings of medical witnesses, and must shake the confidence of the public, as it has already done to a great extent in the trustworthiness of medical opinions. Such must be the result when scientific witnesses accept briefs for a defense; when they go into a witness-box, believing one thing, and endeavoring to lead a jury by their testimony to believe another,—when they make themselves advocates and deal in scientific subtleties, instead of keeping to the plain truth. Such men should be marked by the public, and their efforts at endeavoring to confer impunity on the foulest crimes, and to procure the acquittal of the most atrocious criminals should be duly noted. The chemical defenders of the culprit Tawell on the "apple-pip" theory, were in the foremost rank to defend the culprit Palmer! Fortunately for society, their efforts did not prove successful in either case. In the meantime this pernicious system is a heavy blow and a great discouragement to the detection and exposure of murder by secret poisoning. No man in this country can henceforth venture to denounce a grave crime of this kind committed by a person of wealth or social position, without being prepared to incur the most calumnious attacks,

and to have his opinions and motives grossly misrepresented. If, after due consideration, he boldly expresses his opinion at an inquest and persists in it, he is said to be prejudiced; if he hesitates or expresses himself timidly, he is not to be trusted! There is but little protection afforded to a witness by a court of law; the accused person is there the sole object of sympathy and consideration, and a learned counsel is only mildly rebuked who, against the whole bearing of the scientific evidence, asserts that the prisoner is innocent, and asks the jury to adopt his venal assertion in preference to the unbiassed opinions of medical men.

REX *v.* DOVE, York Summer Assizes; Taylor on Poisons, 703.

This case presents many features of interest. The prisoner was charged with the murder of his wife, by administering to her strychnia. About six days before her death, after having breakfasted with the prisoner, the deceased was suddenly seized with loss of power in the legs, general stiffness, twitchings and cramps of the muscles. These symptoms occurred with greater or less severity during the week, and each attack followed soon after the prisoner had administered medicine to her. She had five or more similar attacks in the six days, but from these she recovered. They were set down to hysteria by the medical attendant, and were treated accordingly. On the evening of her death the prisoner, while partially intoxicated, gave to her some medicine as usual (in a liquid form.) She complained of its being hot and very bitter. In less than half an hour she had another attack, and after a succession of fits she died in two hours, under all the usual symptoms of tetanus from strychnia. It seems that in every attack, excepting the last, she had asked to be rubbed; the rubbing seemed to relieve her, and on this occasion when she felt the spasm coming on she asked one of her attendants to take hold of her hand. The appearances in the body corroborated the medical inference, that death had taken place from strychnia, a view supported by Dr. Christison, Mr. Hey, Mr.

Morley, and others. Mr. Morley carefully removed the stomach and contents, and in the latter he found enough strychnia not only to give the chemical results with all the tests, but to poison several animals. Traces were also found in the contents of the intestines. For some unexplained reason, the *tissues* were not examined for absorbed strychnia. Considering that at this time accurate scientific information was required on this point, the omission was a serious one, and equally damaging to the cause of justice as well as the interests of science. If there be any truth in the doctrine of the deposition and retention of strychnia in the organs, this woman's body must have been saturated with the poison.

In the defense it was not denied that death had taken place from strychnia. It was proved and admitted that the accused had procured at different times, recently before the deceased's death, ten grains and five grains of strychnia. The former quantity had been used by him, at least in part, to poison cats and mice; the latter quantity was probably that which, in divided doses, had led to the death of his wife. A defense of insanity was set up, but this utterly failed, as a criminal motive, means, and opportunity were apparent; and with a full knowledge of the effects of the poison, there was evidence of conversation on the part of the prisoner regarding the power of detecting the poison in the body. The only strong point of the defense turned upon the non-analysis of the tissues. The slighter attacks of spasms up to the Saturday were assigned to hysteria; they had been treated as such by the medical attendants; if due to strychnia administered in divided doses over a week, the poison would have been found in the tissues, and should have been sought for there. The fatal illness and death, as well as the appearances in the body, and the discovery of strychnia in the contents of the stomach and bowels, were, it was contended, reconcilable with the hypothesis of *one* accidental administration of the poison in the medicine or food on Saturday night. The supposition of accident was however inconsistent with the conduct of the prisoner, and

he was properly convicted and executed. Nevertheless it is a matter to be regretted that the alleged frequency of administration was not supported by the detection of strychnia in the blood and tissues, especially as one of the analysts (Mr. Nunneley) had volunteered his opinion at the trial of Palmer three months previously that it might be there detected! But considering the kind of defense set up in Palmer's case, and supported by Mr. Nunneley, the omission was judicious. The result might have at once falsified some of the loose assertions made at this trial.

CHAPTER XXXIX.

INFANTICIDE.

Medical testimony is constantly called for, in questions of Infanticide. By this term is designated those cases where there is a question whether the child was born alive, and its life afterward criminally terminated.

In these cases, the first important point after the pregnancy is established, is to determine whether the child was born alive. Infanticide may be committed upon an unborn live child. But if the child was dead when born, and no evidence exists of its having suffered in utero, that ends the case. Hence the great importance of determining accurately, whether the child lived after being born. This is often attended with much difficulty, and calls into the requisition the highest scientific knowledge.

How does a *still-born* child differ from one born alive during the first few hours of its life? 1. The lungs, thorax and trachea, show no signs of having been inflated, and lie in the posterior part of the thorax, surrounded with a fluid of glutinous character. 2. Owing to the hurry of concealment, when a child has actually been born dead, in those cases when there is an object in concealing the death, the child is found still covered with the *vernix caseosa*, or sebacious secretion. The hair is closely agglutinated. The eyes are closed, and the eyelids, when raised, immediately shut.

If the child has breathed, the lungs occupy a larger space in the thorax than in the still-born. The cavity is generally completely filled, and the lungs partly cover and conceal the pericardium. They feel tough and doughy, and retain the impression of the finger slightly. They crepitate when pressed or cut, and when

cut yield blood in small quantities, and of a frothy appearance. When pressed between the fingers under water, air bubbles rise from them. The diaphragm is lower than in the still-born. They are heavier than the fœtal lungs, though lighter than water. The desiccation of the cord is supposed by Billard, and obstetricians generally, to be an act of vitality, and therefore can not occur in the still-born child. This has been called in question, however, by Elsasser and others, who claim to have seen the phenomen in the case of the still-born. This process begins at the severed end, and in the course of twenty-four hours after birth, reaches to within half an inch of the navel. The withering and desiccation of the cord gives a fair presumption that the child was born alive and lived some time, and as the process is a gradual one, its extent will indicate tolerably correctly the length of time the child has survived. The eyes remain half open if the child has been alive, and resist all efforts to close them. The hair is usually dry and clean, and the ears stand out from the head more than in the still-born. The *vernix caseosa* is only found under the armpits and behind the ears; and then only when the birth has been recent. In other respects mostly, the child born alive does not differ externally from the still-born, and if there has been but feeble life and respiration, the appearance is not particularly different from what it is in the strong and healthy. It must be admitted that the test arising from the condition of the lungs is somewhat shaken, from the fact that there *may* be vaginal or even uterine respiration, if the testimony of credible and intelligent medical men is to be taken. It is, however, so rare,—many obstetricians whose practice has been the most extended, not having met a case of the kind,—it hardly forms an exception to the general rule, that when air has passed into the lungs the child was born alive.

What are the proofs of air having filled the lungs? The question is important, as this condition is claimed to be the most important and decided test, of a live birth, within the knowledge of medical men. There are no tests that certainly determine the

fact that the child breathed after birth. There may also be life without respiration. So this condition may not exist, and still the child may have been killed after birth. In a case of this kind, all the medical expert could do would be negative. He could only determine that the child had not breathed, leaving the question of the existence of life to be established by other testimony.

Dr. Schriyer, of Zeitz, first applied what is called the hydrostatic test, to the solution of this question. It depends upon the difference of *specific gravity* between the lung of a child that has breathed, and one that has not. It is said that the lung of the former will swim, while that of the latter will sink. If they float, the reasoning is, air has entered the part, and the higher they float the more perfect has been the respiration. Porous lung, or that part fullest of air-cells, should be used in this test. Then the test is far from being satisfactory, though the most so, perhaps, of any. A portion of the lung from an unborn child may swim, and a piece from one born alive may sink, for various reasons known to the pathologist and physiologist. The temperature of the water, too, is an important element in the investigation. In a case of alleged child murder recently tried in Pennsylvania, the State undertook to establish the fact that the child had been born alive, by evidence of an examination of the lungs by the hydrostatic test, physicians giving it as their opinion that the child had lived, because the lungs floated in water, in whole or in part. The physician, having neglected to regulate strictly the temperature of the water in which the lungs had been tested, it was taken advantage of by the counsel for the defense, who by a very ingenious and delicate experiment demonstrated to the jury that there was no reliance to be placed on the hydrostatic test, unless the temperature of the water had been carefully ascertained. He put a small vial of shot, just heavy enough to float in water of a medium temperament, into warm water, and it sank; on putting it into cold water the vial floated.[1] Then the

[1] Wharton's Criminal Law, sec. 874; W. & S. Med. Jur. 280.

air which gives buoyancy to the lungs may have been introduced otherwise than by natural respiration. The sources from which the air may have been derived are putrefaction, emphysema, and artificial inflation after death, and this artificial inflation, cannot be distinguished from that of imperfect respiration. Though the child lived and breathed, the lung used in the water test may still sink from disease of any kind that increases the density of the part.

Hence the medical witness is unable to say positively, when the lung sinks, that the child has not lived, or when it swims, that it was born alive. The weight of authority now is, that in cases of alleged Infanticide it must be clearly shown, not only that the child breathed at birth,—this is not enough,—but that the child had acquired an independent circulation and existence. This proof of an existence, contrary to the ordinary presumption of law, has been extended by Judge Story to a child several months old, whom the mother, during an attack of puerperal fever, had thrown out of the window of a steamboat. This decision of Judge Story had been criticised by Judge Gibson, in a leading Pennsylvania case.[1] While these difficulties attend the questions connected with the condition of the lungs, the medical witness has discharged his duty when he has stated what is settled upon the question, and that is but little.

The question as to what caused the death of the child,—whether it was criminal or accidental,—either before or after birth, is often solved only by the medical witness.

Death sometimes results from the compression of the cord during parturition, and leaves marks similar to that of strangulation by other causes. Ecchymosis may possibly occur from tightness of the umbilical cord, though this is not likely; but Taylor says, if this condition is attended with abrasion of the skin it could not have been produced by the cord. Protracted delivery

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[1] Whart. Crim. Law, sec. 748; R. *v.* Poulton, 5 Car. & P. 399; Commonwealth *v.* Harman, 4 Barr. 272.

often produces death, or the child may die from mere debility. Hemorrhage from the umbilical cord sometimes is the cause of death. Fractures of the skull of new-born infants does not necessarily imply criminality. The skull of the unborn infant may be fractured from a violent blow received on the abdomen of the mother. It may occur during labor from the force of the pains, the condition of the passage favoring it. The appearance of the wound and fracture, in these cases, as in others, may determine whether an instrument has been used to effect it. Sometimes *defective ossification* of the bones of the head are mistaken for a fracture. The cautious witness, however, will not make the mistake. The mother is sometimes delivered in such a position, and without help, that the child falls some distance, and is thereby killed. The possibility of this accident is always to be remembered by the medical witness.

The accidental causes that may produce death after birth are, of course, numerous. Exposure, suffocation, strangulation, drowning, poisoning, etc.

These are the main points of medical testimony in cases of alleged Infanticide, stripped of rare and singular cases, and theoretical discussion.

ENGLISH ADJUDICATED CASES.

REX *v.* POULTON, 5 Carr. & Payne, 377.

In this case, Anne Poulton, the defendant, being charged with having murdered her child, the medical witnesses testified as follows: one said: "It frequently happens that a child is born, as far as the head is concerned, and breathes, but death takes place before the delivery is complete. My opinion in this case is, that the child had breathed; but I can not take upon myself to say that it was wholly born alive." Another said that death might have occurred when the child was partly born, if no medical man was present to assist in the delivery. The third said: "It is impossible to say when the child respired; but there is no doubt, from

the state of the lungs when they were examined, that it had breathed; children may breathe during the birth."

Mr. Justice Littledale said to the jury: "The material question for you will be, was the child born alive. For, if it was not, the prisoner can not be convicted of the murder. But if you think there is sufficient evidence that the child was born alive, then you will inquire if the prisoner was the cause of its death; and if you think she was, you will find her guilty of the murder. But if, in your opinion, either the child was not born alive or that the prisoner was not the cause of its death, then she may be found guilty of concealing the birth, if you think that fact is made out. With respect to the birth, the being born must mean that the whole body is brought into the world; and it is not sufficient that the child respires in the progress of the birth. Whether the child was born alive or not, depends mainly upon the evidence of medical men. None of them say the child was born alive; they only say it had breathed; and if there is all this uncertainty among the medical men, perhaps you would think it too much for you to say that you are satisfied that the child was born alive." The jury said they thought the child was not born alive.

CHAPTER XL.

EFFECT OF WOUNDS IN PRODUCING DEATH.

The surgeon who undertakes to dress or treat a case of criminal wounding may be certain that he will be called as a witness, —as a medical expert, and that his own treatment will undergo a rigid scrutiny. He assumes, therefore, more than ordinary responsibility. If his treatment is in the least out of the usual course in either direction,—whether novel or negligent,—it will be urged in mitigation of the crime. From the fact that death may follow a wound, and yet not be the cause of it, the utmost care and the nicest discrimination should be made by the attending physician or surgeon; two lives instead of one may depend upon the medical treatment.

The rule of law upon this subject is, that if a man give another a stroke not in itself so mortal, but that with good care he might be cured, yet if the party die of this wound within the year and day, it is murder, or other species of homicide, as the case may be; though if the wound or hurt be not mortal, and it shall be made clearly and certainly to appear that the death of the party was caused by the ill application by himself or those about him, of bad medical or surgical treatment, and not by the wound or hurt, it seems that this is no species of homicide. But when a wound not in itself mortal, for want of proper applications, or from neglect, turns to a gangrene or a fever, and that gangrene or fever is the immediate cause of the death of the party wounded, the party by whom the wound is given is guilty of murder, or manslaughter, according to circumstances. For though the fever or gangrene, and not the wound, be the immediate cause of

death, yet the wound being the cause of the gangrene or fever, is the immediate cause of death, *causa causati*.[1]

Thus, it was resolved, that if one gives wounds to another, who neglects the care of them, or is disorderly, and doth not keep that rule which a person wounded should do, yet if he die, it is murder, or manslaughter, according to the circumstances, because if the wounds had not been, the man had not died; and, therefore, neglect or disorders in the person who received the wounds shall not excuse the person who gave them.[2]

When a surgical operation is performed in a proper manner, and under circumstances which render it necessary in the opinion of competent surgeons, upon one who has received a wound apparently mortal, and such operation is ineffectual to afford relief and save the life of the patient, *or is itself the immediate* cause of death, the party inflicting the wound will, nevertheless, be responsible for the consequences.[3]

Nor does a refusal upon the part of the injured person to submit to the necessary surgical treatment excuse the person committing the offense. In the case of Holland, who was indicted for murder, it appeared that the deceased had been waylaid and assaulted by the prisoner, and that amongst other wounds, he was severely cut across one of his fingers by an iron instrument. The surgeon urged him to submit to amputation of the finger, telling him that unless it was amputated, he considered that his life would be in great hazard. The deceased refused to have the finger amputated. The surgeon dressed it, and the deceased attended from day to day to have the wound dressed; at the end of a fortnight, however, lock-jaw came on, induced by the wound on the finger; the finger was then amputated, but too late, and the lock-jaw ultimately caused death. The surgeon deposed, that if the finger

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[1] 1 Russel on Crimes. 505; 1 Hale, 428.

[2] Rew's case, Kel. 26; Roscoe's Crim. Ev. 704.

[3] Commonwealth *v.* Green, 1 Ashmead, 289; The Commonwealth *v.* McPike, 3 Cush. 181.

had been amputated at first, he thought it most probable that the life of the deceased would have been preserved, and it was contended for the prisoner that the cause of the death was not the wound inflicted by the prisoner, but the obstinate refusal of the deceased to submit to proper surgical treatment. Maule, J., however, was clearly of the opinion that this was no defense, and told the jury that if the prisoner willfully, and without any justifiable cause, inflicted the wound on the party, which wound was ultimately the cause of death, the prisoner was guilty of murder; that for this purpose it made no difference whether the wound was in its own nature instantly mortal, or whether it became the cause of death by reason of the deceased not having adopted the best mode of treatment; the real question was, whether in the end the wound inflicted by the prisoner was the cause of death.[1]

Upon an indictment for manslaughter, it appeared that the prisoner and the deceased had been fighting, and the deceased was killed. A surgeon stated that a blow on the stomach in the state in which the deceased was, arising from passion and intoxication, was calculated to occasion death, but not so if the party had been sober. Hullock, B., directed an acquittal, observing, that when the death was occasioned partly by a blow, and partly by a predisposing cause, it was impossible to apportion the operations of the several causes, and to say with certainty that the death was immediately occasioned by any one of them in particular. It may be doubted how far the ruling of the learned judge in this case was correct, for if by the act of the prisoner the death of the party was accelerated, it seems that the prisoner would be guilty of the felony.[2] It is by no means certain that intoxication was the cause of death; it might render the party more liable to suffer injury from the blows, but this could no more excuse the offender than the infirmities of old age. Lord Hale held that if a man be sick of some disease, which, by the

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[1] Reg. *v.* Holland, 2 M. & Rob. 357.

[2] Roscoe's Criminal Ev. 703; Martin's case, 5 C. & P. 130.

course of nature might possibly end his life in half a year, and another gives him a wound or hurt which hastens his death, by irritating and provoking the disease to operate more violently or speedily, this is murder, or rather homicide, according to circumstances, in the party by whom such wound or hurt was given. For the person wounded does not die *simplex visitation Dei*, but his death is hastened by the hurt which he received; and it shall not be permitted to the offender to apportion his own wrong.[1]

Upon an indictment for manslaughter, it appeared that the death was caused by a blow on the back of the neck, and that the deceased was not at the time in a good state of health, and that she was desired to remain in the hospital, where the best of care would be afforded her, but would not. Park, B., said: "It is said that the deceased was in a bad state of health, but that this is perfectly immaterial; as if the prisoner was so unfortunate as to accelerate her death, he must answer for it.[2] So when Morrison's pills have been administered to a patient ill of the small-pox, and the medical witnesses gave it as their opinion that the pills must have aggravated the disease under which the deceased labored, and have accelerated his death, it was held by Lord Lyndhurst, that "It is true, the witnesses do not say whether the deceased would, in their opinion, have died of the small-pox if the pills had not been administered, but they all agree in this, that his death was accelerated by the pills. Now, their evidence, being translated, comes to this, that the party died on the day when he did die, viz: on the 27th of June, by reason of these pills. At present, therefore, it appears to me that the indictment was good." Where death has been accelerated or occasioned by medicine given in small-pox under the circumstances, it was held that the prisoner was liable.

Mr. Roscoe says very few decisions are to be found in our own books on this subject, and it may be therefore allowable to

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[1] 1 Hale, 428.

[2] Rex *v.* Morton, C. & P. 128.

illustrate it by reference to a few cases in the Scotch law, which is in principle the same as our own on this point, and to the text writers on the criminal law of the country. It is clear, says Mr. Alison, that if the death be owing, not to the effects of the wound, but to a supervening accident or misfortune, though induced by the first violence, the prisoner can not be convicted of homicide.

When the prisoner had thrown a quantity of sulphuric acid in the face of the deceased, and produced inflammation of the eyes, that bleeding was deemed necessary, and the orifice made by the surgeon inflamed, and of this the party died, but not of the injury of the face, the court held this *second* injury produced by a different hand not so connected with the original violence as to support the charge of murder, and the prisoner was convicted of assault only.[1] When a physician is summoned in one of these cases, he is very apt to be pressed for a positive opinion as to the cause of death, which opinion he can not give positively. Though there may not be but one ultimate cause of death, there may be many accelerating or auxiliary causes, and the medical witness is expected to give to each its relative importance and place. The determination of these cases rests almost wholly on medical testimony. The connection between the act of the prisoner and the death of the deceased, must be proved by the opinions of persons of professional skill and experience.

The important question for the medical witness to settle for the court and jury is, would the deceased have died at the time he did, or as soon, had he not received the wound? No one, of course, can determine absolutely what wounds are necessarily mortal, and what ones are not; each case, therefore, must be judged by itself, and the circumstances surrounding it. It is too much to expect that a medical witness will determine certainly whether a wound is fatal or not. In many cases he may easily, and surely pronounce a certain wound fatal, from the parts affected, but there are so many aggravating causes, both constitutional

[1] Macmillan's case, Alison's Prim. Cr. L. of Scot. 147.

and others, that a very simple injury may prove deadly. The witness must be on his guard in deciding these cases. Taylor has well said, "that a witness can not do greater mischief to his own reputation than by assigning many speculative causes for death. The court will at once infer, that he is ill-informed in his profession, or that he has taken no pains to estimate in his own mind what was the real cause, previous to the appearance at the trial. By preliminary reflection it is very easy for medical witnesses to guard against the common occurrence of stating one cause of death to the counsel for the prosecution, and another to the counsel for the prisoner."

In judging of the effect of a wound in predisposing to, or in producing death, there are so many circumstances to be taken into the account, that only a few, comparatively, can be here referred to.

Wounds of the head are more difficult to determine, in their extent and effect, than in any other part. The particular part of the head hurt—the age—the weapon used—the state of the system, etc., all tend to complicate the prognosis. A wound of the superficial integuments, though simple, may inflame and extend to the brain very unexpectedly. Erysipelas may inflame the disease suddenly, and produce death. Slight wounds of the integuments, by producing inflammation of the bone and membranes, are often more dangerous than extensive injuries. A case is reported, where a soldier got drunk on the line of march, and was placed in a baggage wagon, out of which he fell, his head coming right in the track of the wheel, which passed obliquely over it, stripping the whole of the integument off one side of it, and leaving the bone completely bare. The integuments being replaced and secured by stitches, and the whole kept *in situ*, by means of bandages, he travelled for four days on the wagon, when he was put into the hospital, and in less than a fortnight was enabled to resume his duty. Even a complete division of the pericranium is not so dangerous as a wound from a sharp pointed instrument. From the arch shape of the head, the real injury to life may be

at the base, though the force was applied to the superior part of the head. Orfila says, there is more danger from a blow when given from above downward, than if it falls laterally, from below upward, and Watson agrees with him. In a case tried in Scotland, in 1812, quoted by Beck from Dunlap, the murder was perpetrated by repeated blows on the top of the head, yet the fractures, four in number, were all at the base of the skull. There may be no fracture, yet the concussion may produce death: there may or may not be any disorganization or change in the structure of the brain revealed by post mortem examination, it being a functional derangement, affecting the vital forces.[1]

In these cases, and a thousand others, all the medical witness can do, is to explain the uncertainty of recovery from such injuries, and it is also well to show, under what extraordiuary circumstances persons will survive, with all their faculties unimpaired.

The French surgeons have generally agreed upon the following four aphorisms of Vicq d'Azzr, as comprising the experience of the art on these points: 1. That the larger wounds of the head are not always the most dangerous. 2. That it is possible to lose a considerable quantity of the brain without death ensuing. 3. That the slightest injuries often are succeeded by fatal consequences, and that hence they should, in no case, be neglected. 4. That a contusion of the bone alone may gradually extend itself so as to effect the brain.

It is well to remember, that the testimony of individuals who have been hurt by injuries upon the head, is not very reliable, because of the disordered state of the intellect, and of the memory in particular, from the effect of the injury. This kind of testimony should always be corroborated.

The eye being so intimately connected with the brain, injuries of it are more dangerous than of any other part of the face below the brain, and the medical witnesses' opinion as to the effect of a wound on this part should be cautious. This is also true of

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[1] Cooper's Lectures, Vol. 1, page 119.

wounds of the neck. If the par vagum or the spinal marrow is injured, death is inevitable, while extensive injuries of the blood-vessels, larynx and trachea, may not prove fatal. Dislocation of the neck is not always destructive of life though generally so.

Mr. James L. Van Gorder, of Warren, Ohio, several years ago partially luxated his neck, so that ever since, he has carried his head partially on one side, yet he still lives and attends to business, though suffering constantly great pain.

Dr. Spencer, of Ticonderoga, gives a case where the dentatus was luxated completely, yet the patient lived forty-eight hours, with complete paralysis below the head; he retained his speech.

Wounds of the thorax, in general, are not so dangerous as those of the head and neck. Injuries to the lungs are attended with much danger, yet one may be shot through, as in the case of General Shields, while in Mexico, and not prove fatal, If the large nerves and blood-vessels are uninjured, an extensive wound may possibly heal. If the pericardium is injured it is very apt to extend to the heart, but if the wound does not reach the heart, and does reach the pericardium, it is dangerous, if not absolutely fatal.

Injuries to the heart are not as suddenly fatal as is generally supposed. A British soldier survived for thirteen days with a musket ball in his heart. In a case tried in Glasgow, in 1819, the Medical Evidence showed that the auricles and part of the aorta next the heart, were destroyed by slugs and brass nails, with which the piece was charged, and in that case, he must have dropped down dead the moment he received the shot. But the evidence showed the body to have been found some distance from the door where the prisoner claimed he shot him, as he was entering his house by force, as a stream of blood was found from the door to the place where the body lay. It was determined that the prisoner did not run out into the street and shoot the deceased, but that the deceased did run from the house to the spot where he lay, though shot in the manner described. The prisoner was discharged. Many cases are reported where the

person has survived an injury of the heart. Beck has given a large list of cases.[1] Wounds on the aorta and vena cava must be fatal, so of the lower part of the œsophagus.

The fatality of a wound of the abdomen, like that of the chest, depends altogether upon the part injured. Wounds of the stomach and small intestines are more dangerous than of the large intestines. Wounds of the liver are generally fatal, certainly so, if the gall-bladder is hurt. One great danger attending wounds of the abdomen is from extravasation of blood, bile, fœcal matter, chyle, or urine into the viscera, causing acute inflammation.

The majority of wounds of the extremities are not dangerous, even when the large blood-vessels are ruptured, for modern surgery has triumphed over all difficulties, so far as the immediate effect is involved.

Gunshot wounds are more apt to be attended with serious results, than other injuries.

These are the general points the medical man is to consider, and keep in view, in cases of wounds; but still, it must not be forgotten, that every case of wounding, like every disease the physician is called on to treat, is in some respects different from all others, and must be judged by itself,—that what is fatal in one constitution may be comparatively harmless in another,—that any wound, however small, *may* possibly produce death.

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[1] 2 Beck Med. Juris. 330—Note.

CHAPTER XLI.

RAPE—ADJUDICATED CASES.

RAPE, in law, is the carnal knowledge of a woman *without*, or *against* her consent.

Common witnesses—the party herself—rather than medical experts, usually determine cases of alleged rape. Questions of fact rather than of opinion decide the result. Yet the medical witness may be called on certain points to which we may properly refer connected with this subject. The evidence, not only of medical experts, but of common witnesses in detail, is given in works on Medical Jurisprudence, leaving much confusion in the mind of the medical witness, as to what he is expected to testify to, as an expert. So generally treating of the common evidence connected with Medico-legal questions, by Medico-legal writers, is to be deprecated. The evidence of the witness who testifies only to facts, is not based upon special scientific knowledge. The medical man can testify to facts as any other witness. It seems singular that writers upon Medical Jurisprudence will constantly load down their works in this way, with outside matter, which, when connected with the great amount of speculation, and the record of strange and extraordinary cases, renders unintelligible and obscure the proper matter of the treatise.

The external signs of violence on the parts of the female upon whom the rape is alleged to have been committed, as well as the general appearances of the persons and circumstances of the case, may be testified to by any intelligent person. When the offense is committed upon a child, the mother or some female friend is usually the best witness,—she sees and examines the parts first. The ability to resist, is not a Medico-legal question

in a healthy person, any person of judgment may determine that fact.

The questions connected with the hymen, venereal disease, the use of chloroform and the like, must be solved by the medical witness alone.

If a child is the subject of an alleged rape, and gonorrhœa is found to exist, the presumption is, that it was produced from sexual intercourse, and not otherwise:—though it may *possibly* have been communicated in some other way; the cases however are so rare, the presumption is against this idea. Unless the physician is on the look-out, he may readily mistake leucorrhœa for gonorrhœa, the discharges being similar, and the attending symptoms so much alike. The opinion, therefore, of the medical witness, should be well considered and cautious on this point. The two diseases must be carefully and recently studied, and compared, before a safe opinion can be given.

Gangrenous inflammation of the vulva may occur naturally, although rarely. The value of the hymen, as indicating rape, is not of as much importance as was once supposed; for the reasons, that it is not always destroyed by the first connection, and it may be lost from other causes than coition.

The most reliable medical evidence in these cases is undoubtedly the presence of *seminal stains* upon the clothing of the female. There is no doubt but that the skillful and enlightened microscopist, will detect the peculiar characteristics of semen in the fresh or dried specimen. The animalcules will be seen. The chemical tests of semen are of some value. Semen is alkaline and glutinous, and slowly soluble in water, with a peculiar and distinctive odor.

Rape, in a legal sense, is the violent assault, or the destroying of resistance by artificial means, by which chastity is destroyed. The agent may not have been given to overcome consciousness; if the object is to produce sexual excitement, and thereby leading to voluntary submission, it is equally criminal. If any agent is given by which reason is suspended, and while that condition

exists the person is violated, it is rape. Ignorance of the nature of the act on the part of the female, though with her consent, renders the act rape.[1] If the child was of tender years she can not give consent in law.[2] If connection is had with a man through fraud, the woman mistaking him for her husband, it is rape on his part.[3] Consent under duress or fear is no defense.[4] The prior and present character of the complainant, may be shown for the purpose of affecting her credibility, but not as a justification for the act. She may be asked whether she had not had previous connection with other men, and she is not privileged from answering.[5] In a case in England, the following question was asked the prosecutrix: "whether she was not, on the Friday last, walking on High-street to look out for men," which she denying, a witness was allowed by the defense to contradict her.[6] As a general rule, veracity can not be impeached by attacking chastity, but when rape is the issue it may be.

The testimony of medical men may therefore be required as to previous venereal disease, delivery, or other evidence of illicit intercourse falling within his peculiar province.

It was at one time held in England, that to constitute rape, there must have been an *emission* within the parts of the female. By the statute of that country, now in force, emission is not essential. It has always been held that the entrance of the private parts of the man within the private parts of a woman, when proved, constitutes rape.[7] In this country it is the general

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[1] R. *v.* Stanton, 1 Car. & Kir. 415; R. *v.* Case, 1 Eng. R. 544; Wh. Cr. Law, 4th Ed. 584.

[2] Hays *v.* People, 1 Hill, N. Y. Rep. 351; Stephen *v.* State, 11 Ging. 225.

[3] 1 Wheel. C. C. 381; People *v.* Metcalf, 1 Wheel. C. C. 378; State *v.* Ship, 9 Com. 54.

[4] Dalt. C. 105—607; 1 Hawk. P. C. Ca. 41; Wh. Cr. Law, 584.

[5] People *v.* Abbott, 19 Wend. 192.

[6] R. *v.* Booker, 3 C. & P. 589.

[7] R. *v.* Allen, 9 C. & P. 31; R. *v.* Russell, 1 East. P. C. 438, 439; R. *v.* Jordan, 9 C. & P. 118; R. *v.* Hughes, 8 C. & P. 752; R. *v.* Sims, 1 C. & K. 393; W. & S. Med. Juris. sec. 432.

rule, that some entrance must be proved, but that there need be neither rupture of the hymen or emission.

REGINA *v.* WILLIAM CAMPLIN, 1 L. & P. 746.

The prisoner was indicted for ravishing Jane Matthews, on the 31st day of December, 1844. It was proved that the prisoner made her quite drunk; and when she was in a state of insensibility took advantage of it and violated her. The jury found that the prisoner gave her the liquor for the purpose of exciting her, not with the intention of rendering her insensible, and then having sexual intercourse with her. Ballantine, for the defendant submitted, that under those circumstances the crime of rape was not committed. Parke, B., reserved the case for the fifteen judges. Verdict—Guilty.

When the case came before the judges, Ballantine, for the prisoner, said: "I submit, that in this case the offense of the prisoner did not amount to rape. Lord Hale, Mr. Sergeant Hawkins, Lord Coke and Sir E. H. Easrall, define rape to be the unlawful carnal knowledge of a woman *by force, and against her will.* In the present case, the giving the prosecutrix liquor to excite her, shows that the prisoner intended to bring her mind to a position that she might yield to what he did, and I submit, that to constitute rape there must be actual force and actual resistance, and that this can not be supplied by any inference whatever.

Patterson, J.—Do you contend that every woman who is blind drunk at the road-side is open to a rape from every person who passes by?

Ballantine.—The cases go to show that there must be actual force and actual resistance; and I submit, that insensibility is contradictory in terms to the definition of rape, as the definition of rape implies will, and the exercise of it. In cases of robbery, as distinguished from larceny, the offense must be against the will of the person robbed; thus, a person would be guilty of

robbery by taking goods from a person asleep. Authorities show that, if a man, by fraud, has connection with a married woman, she believing him to be her husband, and therefore consenting to the connection, this is not rape.

Patterson, J.—If a man came behind a woman and gave her a blow on the head, and made her insensible, that, according to your doctrine, is no rape, because resistance and will are out of the question.

Alderson, B.—In cases of fraud the woman is a willing agent, although her will is influenced by the fraud; but in the case put by my brother Patterson, there is force. In that case resistance would be impossible, from a blow given by the prsioner. In the present case, it was rendered impossible by the liquor he gave. If a woman was fainting at the time, what would you say then?

Ballantine.—I would fall back on the definition, 'against her will.' I should draw the distinction between robbing by force, and picking a person's pocket when he did not know it.

Erle, J.—Larceny and robbery are both committed *invito domino*.

Lord Denman, C. J.—It is against the general and permanent will of the party to have his pocket picked.

Alderson, B.—And so may a woman have a general will not to be ravished. Was there not a case in Ireland, of a lady who had laudanum given to her, and who was ravished while in a state of insensibility? What became of that case?

Ballantine.—In that case the prisoner was condemned and afterward transported; but in that case, the jury found that the prisoner had intended to ravish her at all events. The finding of the jury here is different. I submit, that as it is neither shown that the prisoner used force, nor that the prosecutrix exercised any resistance, the offense of rape is not committed.

Lord Denman, C. J.—It is put as if resistance was essential to a rape; but that is not so, although proof of resistance may be strong evidence in the case.

The case was considered by the judges, and Patterson, J., delivered judgment as follows: William Camplin, you have been found guilty of the offense of rape, by the jury before whom your trial took place; but, from some circumstances which appeared upon that trial, the learned judge desired to have the opinion of his brethren, her Majesty's judges, whether the offense was complete in point of law. It appeared upon the evidence that the young woman, upon whose person was committed the offense, refused her consent so long as she had sense or power to express such want of consent; but that you made her quite insensible by administering liquor to her, and whilst she was in a state of insensibility took advantage of it, and violated her person; and the only ground upon which any doubt could possibly arise on this state of facts was, that the jury found that you gave her liquor for the purpose of exciting her, and then having sexual intercourse with her, and not for the purpose of rendering her insensible. It is my duty to inform you, that, after hearing counsel on your behalf, a great majority of the judges are of opinion that the evidence, that the rape was committed without the consent and against the will of the prosecutrix, was sufficient, and that consequently the offense has been completely proved. The prosecutrix showed by her words and conduct, up to the very last moment at which she had sense or power to express her will, that it was against her will that intercourse should take place. And it was by your illegal act alone, that of administering liquor to her, to excite her to consent to your unlawful desires, that she was deprived of the power of continuing to express her want of consent. Whatever your original design was in giving her the liquor, you knew that it was calculated in its natural consequences to make her insensible, and you know also that it had produced that effect upon her at the time you took advantage of her insensibility. Your case, therefore, falls within the description of those cases in which force and violence constitute the crime, but in which fraud is held to supply the want of

both. I have therefore the duty cast upon me of pronouncing the sentence of the law, which is, that you be transported beyond the seas for the complete term of your natural life."

The several States have enacted statutory provisions relating to rape; references to which, with the decisions upon them, are here referred to.[1]

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[1] U. S. Law, Act 3d March, 1825, sec. 4—7; Mass. R. S. p. 884; Com. *v.* Cooper, 15 Mass. R. 197; Com. *v.* Drum, 19 Beck, 497; Com. *v.* Goodhue, 2 Metcalf, 193; New York, 2 R. S. 663, sec. 22, 23; Penn. Act 22d April, 1794, 3 Dallas, p. 600, 3 Smith, p. 187; Act 23d April, 1829; Virginia Code, 1849, c. 191—c. 200, for similar offenses against negroes; Ohio, Swan's Stat. 269, sec. 4, 5, 6; Williams *v.* State, 14 Ohio, 222; Johnson *v.* State, 19 Ohio, 593; Laughlin *v.* State, 18 Ohio, 99.

CHAPTER XLII.

CORONER'S OFFICE AND INQUESTS.

Nearly one thousand years ago, King Athelstan, of England, granted certain rights and privileges to the authorities of Beverley who were to attend the special pleas of the crown,—hence the name of coroners, from corona, a crown.

The office from that time onward, was considered a very important one, both as to its duties and honors. The Lord Chief-Justice of the Queen's Bench is *ex-officio* the first coroner of the kingdom; throughout which his jurisdiction extends. As far back as Henry II., the justices, as part of their duties, appointed three knights and one clerk in each county these *Custodes placitorum coronæ*, as they were called, were keepers of the pleas of the crown, and discharged the duties of coroners.[1] Knights alone were eligible to this office.[2] A property qualification was also required.

From the appearance of the present lineal descendant of the once high and honorable office, it would never be suspected of such parentage. Like the families themselves, who monopolized the office, it has become dilapidated, and its significance has departed, yet it is still an office demanding a higher place than it now occupies. It should never have been permitted to sink to so low a point as the one at which it now rests.

There is hardly an official position in which there is greater need of sagacity, skill, tact, and of legal and medical knowledge;

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[1] History of Eng. Law, Crabbe, c. xi.

[2] 3 Edward I. c. 10.

yet the office is usually filled by persons destitute of both these qualifications.

The old English law provided that where a sudden death took place, under suspicious circumstances, the coroner should issue a warrant, summon a jury to make due inquiry, upon view of the body, into the manner of the killing, and examine into all the circumstances of the transaction, and that he shall commit any person to prison who may be adjudged as the perpetrator of the crime, and bind over the witnesses by recognizances, to appear at the next term of court. All these powers, and still greater facilities, are afforded the coroners under our laws.

When there has been a sudden and mysterious murder committed, the first court that investigates the case, while all the community is excited to the highest pitch, is the coroner's; which court, in its very nature and powers, is designed to detect the perpetrator of the crime, and to throw all possible light upon the transaction. When the coroner does not detect the perpetrator of a homicide, in most cases he is not detected at all. The means and facilities for determining who the guilty party is, within reach of the coroner, are very great. When a crime has just occurred, there is more interest felt and wakefulness exercised than afterward. The body of the deceased is fresh; the opportunity of scientific examination are usually perfect, much more so than after disorganization has destroyed the structure of the body. Those who saw the victim last, and the circumstances surrounding him, are present. Witnesses have not yet been tampered with, and that security which lapse of time gives to the guilty party, is not thrown around him—the anxiety and fear of being detected shows itself—the attempt to cover up the evidences of guilt is more difficult. If the guilty party is followed up immediately with quick, sharp strokes, the chances of arriving at the truth are greatly increased.

Again, in no court is there allowed such unusual latitude in the examination of witnesses. The usual rigid rules of evidence may be wholly disregarded. Hearsay evidence, leading questions,

and all forms of examination may be adopted. The guilty or suspected person may himself be put upon the stand, if he does not object, when he may be subjected to the severest cross-examination possible. No technicalities trammel the coroner, and if he understands his business and his powers, and is ingenious enough, he may extort from a witness a confession of his guilt or complicity. In the criminal courts of Europe this examination of the criminal himself is a tremendous weapon in the hands of an acute and able officer. In France and Germany, the interrogation of the prisoner is the main incident of a trial. In Bavaria, the murderer is not executed until he has confessed his guilt; and he is taken periodically from his cell, to be examined. This method of extorting the truth, by a well-directed battery of questions, is precisely what our law permits to the coroners, and the opportunity should be skillfully and carefully improved.

After the case goes to the higher courts, the lips of the prisoner are sealed by the common law; many of the circumstances are forgotten or left indistinct, antagonistic influences are brought to bear on the witnesses, and other circumstances conspire to render convictions less certain, if the coroner does not furnish the evidences on his preliminary examination.

It is more important that the coroner should be a medical man than that he should be a lawyer; because of the importance of the Medical Evidence, involving many intricate and most perplexing scientific questions, a correct solution of which can only be made by the best instructed minds, used to such investigations.

Of late years, this necessity for having medical coroners has been felt, particularly in England and in this country. It should be so, to secure the ends of justice. The medical profession, too, have a direct interest in this matter, and they should claim as a right, this office. In most cases of sudden death, or homicide, a medical examination at the time, over the dead body, well conducted by a medical man as coroner, would not only be conclusive, as to the condition of the body, but the testimony would be in such certain and definite form, as to confer honor upon the

medical profession in the higher courts; and those medical witnesses who did not examine the body, could get a correct idea of the condition of it, from those who did. If the coroner is a medical man, he will know better than one who has not a medical education, to what extent the medical examination should be carried.

Judge Bouvier says: "The duties of the coroner are of the greatest consequence to society, both for the purpose of bringing to punishment murderers and other offenders against the lives of the citizens, and of protecting innocent persons from criminal accusations. This office, it is to be regretted, is regarded with too much indifference. This officer should be properly acquainted with medical and legal knowledge, so absolutely indispensable to the faithful discharge of his office. It not unfrequently happens that the public mind is deeply impressed with the guilt of the accused, and when probably he is guilty, and yet the imperfections of the early examinations leave no alternative to the jury but to acquit. It is proper in most cases to procure the examination to be made by a physician, and in some cases it is the coroner's duty.[1]

Dr. Beck also urges the difficulty, in the following language: "That the duties of this office are imperfectly understood, and often most negligently performed, hardly admits of a doubt. The individuals appointed are frequently unfit for the situation, both from habit and education, while the jury are too commonly desirous of hurrying through the investigation. It has been proposed to remedy the first difficulty by selecting coroners from among medical men, and there is no doubt that the administration of criminal justice might be promoted thereby. In England, and indeed in this country, considerable efforts have been made of late to procure the election of medical coroners."[2]

Dr. Semmes, in his able report to the "American Medical

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[1] 1 Bouvier's Law Dictionary, 318.

[2] 2 Beck, Med. Juris. 2.

Association," on the *Medico-legal* duties of coroners, says: "As every inquest involves a medical principle, your committee are pained to acknowledge that, from the shameless and disgraceful manner in which coroner's inquests in most of the United States are necessarily conducted, from the incompetency or want of zeal and attention of that officer, the inquests are rendered loose, vague, hurried, and ill adapted to the purposes for which they are intended at Common law,—the discovery of the cause of death in cases of presumed or alleged felonious killing,—the identification of the body, and the collection of that which can often only be susceptible of verification immediately after the discovery of the corpse, and before any change has been made in it and in the condition of the surrounding objects. The superficial view cast by the jurors upon the dead body presented for their inspection, —many of them avoiding to approach it closely, either from repugnance to the sight or contact of the dead, especially when mutilated or disfigured by wounds, bathed in blood, or in a state of partial decomposition, or from fear of contracting some contagious or pestilential disease, which might possibly have been the cause of death,—is scarcely a formal compliance with the requirements of the law."[1] We are indebted to this report for many of the preceding facts.

It is to be regretted, that while the Medical Evidence is of such acknowledged importance, there has been but a niggardly provision made in most of the States of this Union, for a compensation of the medical witness, commensurate with the time spent, and importance of his investigation. The physician and the chemist are referred to the uncertain action of county commissioners or county judges, for their pay. "It is to be hoped, that such a simple act of justice will not much longer be withheld from a body of men who render more unrequited services to the public than all other classes and professions put together." "By the laws of our State, (New York,) it is made the imperative

[1] See Law Register for May, 1858, p. 390.

duty of the coroners to summon a medical man as witness, in every case when an inquest is held; but they establish no regulations as to examination, or to compensation. The law is, however, frequently disregarded; and where the coroner is not a regular physician, the examination is often very superficial and unsatisfactory. It is, therefore, highly important that the coroner should be a medical man, otherwise the duties of the office will be imperfectly understood, and negligently performed."[1]

In England, provision is made by law for the remuneration of the medical witness, when he is called upon to make a post mortem examination.

The medical man, when summoned as a witness to give evidence in a coroner's court, is liable for contempt, if he refuses to appear. He can not, however, by the coroner, or any other court, be compelled to make a post mortem examination unless he is paid for it. In a late case, Gibson, C. J., said: "Had the plaintiff below attended merely as a witness, though as an expert, he would have been entitled to nothing; for as the law provides no compensation for witnesses summoned by the coroners, they must give their attendance; and to allow the plaintiff as a witness, even the compensation allowed to witnesses in other cases, would be an infraction of the fee-bill. But he was not called as a witness. When the testimony before the inquest was closed, it seems the jurors, being unable to agree as to the cause of death, requested a *post mortem* examination, which was made by the plaintiff in their presence, who dispelled their doubts by the application of chemical tests to the contents of the stomach. In this he performed, not the office of a witness, but the business of a person employed in a particular service. The coroner might have compelled him to swear to his opinion on a superficial view of the body, but he could not have compelled him to touch it, or do the more nauseous and dangerous work of opening it."[2]

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[1] Guy's Forensic Medicine, (Dr. Lee,) 6.

[2] Allegheny County, *v.* Watt, 3 Barr. 462.

APPENDIX.

A.—*Notes to Chapter I.*

1. Negligence, in correct legal phraseology, is very nearly synonymous with carelessness, and signifies the want of care, caution, attention, diligence, or discretion, in one having no intention of committing an injury. It is a violation of the obligation which enjoins care and caution. Even when gross, the negligence is but an omission of duty. Tonawanda R. R. Co. *v.* Munger, 5 Den. 255, 267; Amick *v.* O'Hara, 6 Blackf., 258. Neglect of physician, see Odlin *v.* Stetson, 17 Maine, 247; Wilmot *v.* Howard, 39 Vt., 447.

2. Negligence is the omission to do something which a reasonable man, guided by those considerations which ordinarily regulate the conduct of human affairs, would do, or doing something which a prudent man would not do. Alderson B. Blythe *v.* Birmingham Water Works Co., 11 Exch., 781.

3. A party is not negligent if he uses all the skill and diligence which can be attained by reasonable means, and is not responsible for failure. Richey *v.* West, 23 Ill., 385; Taylor *v.* Atlantic Ins. Co., 9 Bosw., 369.

4. When there is injury on the part of the plaintiff, and negligence on the part of the defendant concur, the plaintiff cannot recover if the defendant could not have prevented the injury from occurring by the exercise of due care. Bellef. &c. R. Co. *v.* Bailey, 11 Ohio St. R., 333; Lockhardt *v.* Lich., 46 Penn. St. R., 151.

5. Concurring negligence arises when both parties contribute to produce the injury complained of, and there can be no recovery in law or equity. Spencer *v.* Utica &c. R. Co., 5 Barb., 337; Brown *v.* Maxwell, 6 Hill, 592; Williams *v.* Mich. Cent. R. Co., 1 Dutch, 556; Heil *v.* Glanding, 42 Penn, 493; Haley *v.* Earle, 30 N. Y. R., 208.

6. It has been held that when the direct cause of the injury is the negligence of the party injured, the other party, after becoming aware of the injured party's negligence, must use a proper degree of care to avoid the consequences of such negligence. Wright *v.* Brown, 4 Ind., 95; 9 Ind., 397; Kerwhacker *v.* Cleveland, C. & C. R. Co., 3 Ohio S., 172; also in Duval, 114; 19 Ill., 499; 18 N. Y., 248, 258; 3 Allen, 176; Clark *v.* Kirwan, 4 E. D. Smith, 21.

7. Physicians are liable for students' negligence, or when employed by third persons. Henke *v.* Hooper, 7 C. & P., 81; 1 Hilliard on Torts, 252.

8. When the negligence of the plaintiff is relied upon to defeat his recovery, he must have been guilty of at least *ordinary* negligence. His failure to take *great* care is no defense to the action. Ernest *v.* Hudson R. R. Co., 35 N. Y. 9, 26; Bieseigel *v.* N. Y. C. R. Co., 34 N. Y., 622, 628, 632; 2 Seld. Notes, 44; Eakin *v.* Brown, 1 E. D. Smith, 36.

9. Though a physician may be guilty of culpable negligence, yet if his act was not wanton and intentional, and the patient essentially contributed to produce the result, he cannot recover. Berge *v.* Gardiner, 19 Conn., 507.

10. The patient must also exercise ordinary care and prudence. Eakin *v.* Brown, 1 E. D. Smith, 36; Spooner *v.* Brooklyn R. R. Co., 31 Barb., 419; Cox *v.* Westchester Turnpike Co., 33 Barb., 414; Morris *v.* Phelps, 2 Hilton, 38.

11. The patient may be negligent to a certain extent, and yet the physician has been so negligent that ordinary care on the part of the patient would not have prevented the unfortunate result, and the patient will recover. Clark *v.* Kerwin, 4 E. D. Smith, 21; Parker *v.* Adams, 12 Metc., 417; White *v.* W. Co., 7 Cush., 155; Smith *v.* Smith, 2 Pick., 621; Holly *v.* B. G. Co., 8 Gray, 131; Chamb. *v.* Porter, 9 Min., 260.

12. For definition of "reasonable diligence and skill," see Kannen *v.* McMullen, Peake, 83; Fornworth *v.* Garrard, 1 Campb., 38; West *v.* Martin, 31 Miss., 375; Fisher *v.* Samanda, 1 Camb., 190; Manypenny *v.* Hartland, 2 C. & P., 378.

13. When a *special* contract exists for a definite time, the patient cannot discharge the physician before the expiration of the contract. In all other cases, the patient can discharge the physician at any time *sua sponte*. A physician must give his patient reasonable notice before leaving him. McDaniel *v.* Yuba Co., 14 Cal., 444.

14. For a late leading case on negligence, skill, responsibility, &c., see Patten *v.* Wiggin, 51 Maine, 594.

15. A sign, or other proof that one practices as a physician, is *prima facie* evidence of his professional character. Sutton *v.* Tracy, 1 Mich., 243.

16. A physician is expected to practice according to his avowed system. Bowman *v.* Woods, 1 Iowa, 441; Corsi *v.* Maretzek, 4 E. D. Smith, 1.

17. A sign is a standing solicitation for business, and in pleadings a physician may be charged with having solicited the service simply on the evidence of his sign.

18. The word physician or doctor is held to mean any person who makes it his regular business to practice physic, and no distinction is taken as to the various "schools," and each is expected to practice according to his theory. Corsi *v.* Maretzek, 4 E. D. Smith, 1; Brown *v.* Mins, 2 Rep. Con. Ct., 235; Patten *v.* Wiggin, 51 Maine, 594; Reynolds *v.* Graves, 3 Wis., 416.

19. A medical diploma is *prima facie* evidence of ordinary skill. Leighton *v.* Sargent, 7 Foster, N. H., 470. But not evidence *per se* that the college issuing it is a regularly constituted medical institution. Hill *v.* Bodie, 2 Stewart & Porter, 56.

20. Usually the patient must furnish the medicines and unusual or extra surgical instruments, unless it is the custom of the physician to do so. Bassett *v.* Spofford, 11 N. H., 167; Holland *v.* Adams, 21 Alab., 680.

21. A physician has discretionary powers over his patient as to modes of treatment or the necessity of an operation, and he may withhold from him a

knowledge of his condition. McClellan *v.* Adams, 19 Pick., 333; Townley *v.* Leach, 11 Cush., 397.

22. Dentists are liable to same rules as those applicable to physicians and surgeons. Simonds *v.* Henry, 39 Maine, 153.

23. For failure in detecting the nature of the disease, see Fowler *v.* Sargeant, 1 Grant, 355. In cases of malpractice, it is usual to inform the jury of the circumstances of the respective parties. *Ib.*

24. Gratuitous service does not relieve the medical attendant from liability. Shiels *v.* Blackburn, 1 H. Black, 159; Nelson *v.* Mackintosh, 1 Starkie, 188; Wilson *v.* Brett, 11 M. & W., 113. He is also liable in public institutions. Pippin *v.* Shep., 11 Price, 400. If employed by a third party, he is liable. 1 Hilliard on Torts, 252. Or by an infant. Gladwell *v.* Sleggall, 5 Bingham, N. C., 733.

25. Particular acts of misconduct of the defendant might be given in evidence to sustain general allegations in the declaration; and that it was competent for the plaintiff to show by what means such injuries were received; and that the declaration of the defendant that B. was infected with venereal disease, and that this was the cause of the difficulty of her case, it being proved that she had not this disease, was admissible, for the only purpose of evincing the ignorance of C. as to the real state of her case; and that it was competent to show that the defendant had not been regularly bred to his profession, for rebutting purposes. Grannis *v.* Brandon, 5 Day, 260.

26. Malpractice cases reported in medical journals. See 40 Boston Med. and Surg. Journal, 318; 54 do., 109, 129, 149, 229; 55 do., 515; 56 do., 9, 25, 148; 57 do., 222; 59 do., 364; 64 do., 97, 505; 65 do., 299; 66 do., 95, 524, 544; 3 Amer. Medical Monthly, 153; 2 Med. Times, (N. Y.,) 365. A late and important case is Walsh *v.* Sayer, tried in the Supreme Court, city of New York, in 1868, (one vol.,) published by Geo. H. Shaw & Co., New York.

27. In an action by a person who had been a patient at a hospital, for maltreatment there by two surgeons, it appearing that the alleged maltreatment was in the administration of a hot bath which they had ordered, but which it was no part of their ordinary duty personally to direct and superintend, and at the actual administration of which they were not present. Held that he was not entitled to expect more than the usual and ordinary degree of care and attention at the hands of the surgeons. And that, if they were not personally cognizant of the alleged ill usage, they were not liable. Perionowsky *v.* Freeman, 4 Fost & F., 977.

28. No particular system affords a test of skill: all "schools" seem to stand before the law alike. Corsi *v.* Maretzek, 4 E. D. Smith, 1; Bowman *v.* Woods, 1 Green, (Iowa,) 441; Com. *v.* Thompson, 6 Mass., 134. And yet the law does not countenance quackery. Long *v.* Morrison, 14 Ind., 595; Ritchey *v.* West, 23 Ill., 385; Fowler *v.* Sargeant, 1 Grant, (Pa.,) 355; Wood *v.* Clapp, 4 Sneed, 65. In North Carolina it has been held that what is reasonable skill in the treatment of a patient is a question of law not to be determined by a jury. Woodward *v.* Hancock, 7 Jones' Law, 384.

29. Failure to remove the *placenta* after child-birth is highly culpable negligence. Lynch *v.* Davis, 12 How. Pr., 323.

30. On the administration of anæsthetics, see Jones *v.* Fay, 4 Fost. & F., 525.

31. The plaintiff had settled with a railroad company on the mistaken opinion that the injury was slight. Held that, even assuming that his injuries were greater, there was no ground of action. Pim *v.* Roper, 2 Fost. & F., 783.

32. In an action on the case against a physician for malpractice, it is not competent for the plaintiff to give evidence that the defendant abandoned the patient and refused to attend upon him, unless the cause of action is so laid in the declaration. Bemus *v.* Howard, 3 Watts, 255.

33. A person not qualified, as not being a regular practitioner, but assuming to be or to practice as such, and undertaking to treat another for a disease, is liable for an injury caused by ignorant and improper treatment, by which the patient is rendered worse instead of better, and is injured by the use of improper medicines. Ruddock *v.* Lowe, 4 Fost. & F., 519.

B.—*Notes to Chapter II.*

1. "We regard the subject of this Chapter of the utmost importance, as tending, if properly considered, to place before the lawyer the real and unavoidable causes of failure on the part of the physician in the treatment of disease. Could the capable and the conscientious legal adviser clearly understand and be thoroughly impressed with the inherent elementary difficulties in the practice of medicine, he would be slow to counsel prosecutions of medical men; and had the Court the same knowledge, we believe that a nonsuit would be the summary termination of many a trial for alleged malpractice. It is upon these subjects that the legal profession is in sad want of information, and we turned to this Chapter in the belief that the medical education of the author would enable him to elucidate, in precise and accurate terms, the true source of failure in practical medicine of which the physician is himself so often conscious." Review of this work (1st edition) in Am. Journal of Med. Sciences for July, 1860.

2. "The *mechanism* of the human body is clear, and that is all. We see the workmen and the tools, but the skill that guides the work and the power that performs it, are as invisible as ever. We have learned nothing but the mechanism of life, and are no nearer its essence. Beyond the mechanical facts, all is mystery in the movements of organization, as profound as the fall of a stone or the formation of a crystal. To the chemist and the microscopist the living body presents the same difficulties arising from the fact that everything is in perpetual change in the organism. The fibrine of the blood puzzles the one as much as its globules puzzle the other. In the brain we are sure we do not know how to localize functions; in the spinal cord we think we know something, but there are so many anomalies and seeming contradictions, and sources of fallacy, that, beyond the facts of crossed paralysis of sensation and the conducting agency of the gray substance, I am afraid we retain no cardinal principles discovered since the development of the reflex functions took its place by Sir Charles Bell's great discovery. No satisfactory and conclusive answer has been made to these questions. Why does one cell become nerve and another bone? why one select bile, another fat?

How is the solvent agency of the digestive fluid explained? What is the meaning of "affinity" or "catalysis" in chemistry? How is it that the liver secretes sugar? or how are blood-corpuscles formed out of lymph-corpuscles, and what becomes of them? What is the office of the viscular glands, the spleen, the thyroid and thymus bodies? What is the function of Peyer's patches? Do these glandules perform the office of lymphatic glands? Which theory of animal heat is correct—that of Black, Lavoisier, Crawford, or Liebig, or of no one of them? That of Liebig now being doubted, who will explain the wonder?" Oliver Wendell Holmes, Professor of Anatomy in Harvard University.

3. "Existing chemistry is therefore all powerful in the circle of mineral nature, even when its processes are carried on in the heart of the tissues of plants or animals, and at their expense. And she has advanced no farther than the chemistry of the ancients in the knowledge of life, and in the exact study of living matter; like them, she is ignorant of the mode of generation. * * The chemist has never manufactured anything which, near or distant, was susceptible even of the appearance of life. Everything he has made in his laboratories belongs to brute matter; as soon as he approaches life and organization, he is disarmed." Inaugural Lecture before the London Chemical Society, in honor of Faraday, June 18, 1869, by Dumas.

C.—*Note to Chapter III.*

Physicians and surgeons who offer themselves to the public as practitioners, impliedly promise, thereby, that they possess the requisite knowledge and skill to enable them to treat such cases as they undertake with reasonable success.

This rule does not require the possession of the highest, or even the average skill, knowledge, or experience, but only such as will enable them to treat the case understandingly and safely.

The law implies that, in the treatment of all cases which they undertake, they will exercise reasonable and ordinary care and diligence.

They are also bound always to use their best skill and judgment in determining the nature of the malady and the best mode of treatment, and in all respects to do their best to secure a perfect restoration of their patients to health and soundness.

But physicians and surgeons do not impliedly warrant the recovery of their patients, and are not liable on account of any failure in that respect, only through some default of their own duty, as already defined. Patten *v.* Wiggin, 51 Maine, 594.

D.—*Note to Chapter IV.*

"According to accurate statistics to which we have access, in several hundred suits for malpractice, but little over two-thirds were for the causes assigned above, (amputations, fractures and dislocations.) Of one hundred and forty-two

suits growing out of amputations, fractures and dislocations, but eight were referable to amputations, thirty-two to dislocations, and the remaining one hundred and two to fractures. We allude to these statistics, not to prove that the subject of amputations or dislocations occupy too much space in this work, but to show that there are many other causes of malpractice suits equally (and in many instances far more) entitled to consideration than these. The practice of obstetrics has given origin to a large number of suits for alleged malpractice, and medico-legal questions thence arising would be appropriate to the pages of such a work." Review of this work (1st edition) in Am. Journal of Med. Sciences, July, 1860.

E.—*Note to Chapter X.*

Prof. March, of Albany, an able surgeon, was once sued by the father of a child ten or twelve years of age, upon whom he performed an operation for strabismus. Inflammation followed, and the cornea become opaque. The Court charged the law as laid down in Leighton *v.* Sargent, ante, 135.

F.—*Notes to Chapter XVIII.*

1. A physician cannot, as a witness, be allowed to express his professional opinion as necessarily to imply his belief of material facts outside of his art or profession, and not within his own knowledge, and which are not in their nature subject matter of mere opinion. William Moore *v.* State of Ohio, 17 O. S. R., 521; McCurry *v.* Hooper, 12 Ala., 823.

2. A physician cannot give an opinion as to whether another practitioner had acted honorably and faithfully; nor can he give an opinion on the *opinion* of another expert. Campbell *v.* Richards, 5 B. & Adolph, 840; Ramadge *v.* Ryan, 9 Bingh., 333.

3. A physician who for more than thirty years has devoted his attention almost exclusively to the treatment of insane persons cannot be permitted, as an expert, to testify as to the medical capacity of a person not previously insane, but in the last stages of disease. Fairchild *v.* Bascom, 35 Vt., 398.

4. A physician's opinion should be formed entirely from his own examination, and not from information derived from others, even if that information is communicated by the attending physician. Heald *v.* Wing, 45 Maine, 392; Whetherbee's Ex'rs *v.* Whetherbee's Heirs, 38 Vt., 454.

5. There is no greater or more common mistake among medical men than to suppose that an experienced practitioner is necessarily a skillful medical expert or a safe medical witness. Lecture by Prof. Christison before the Royal College of Physicians, Edinburgh. London and Edin. Journal of Medical Science, Nov., 1851, p. 402.

6. A physician who has not made the subject of insanity a special study, and who, when his patients required medical treatment on insanity, was in the habit of calling on a physician who made insanity a specialty, or recommending

tho removal to an insane asylum, is not competent to give an opinion on a hypothetical case put to him. Com. *v.* Rich, 14 Gray, 335, 337. In a late case in Massachusetts, a physician who had not made insanity a study was allowed to give opinions on questions of insanity. Barter *v.* Abbott, 7 Gray, 71, 80.

7. In American Courts, the rule is to put the facts to which other witnesses testify in a hypothetical form, and ask the witness his opinion on such state of facts. Woodbury *v.* Obear, 7 Gray, 467, 471; Hunt *v.* Lowell Gas Light Co,, 8 Allen, 169.

8. A medical witness may, when the issue is sanity or insanity, be asked whether such and such appearances, proved by other witnesses, are, in his judgment, *symptoms* of insanity; but he cannot be asked if the act with which the defendant is charged is an insane act; for this is a fact to be decided by the jury. Rex *v.* Wright, R. & R., 456; Rex *v.* Searle, 1 M. & Bab., 75; Collett *v.* Collett, 1 Curtis, 687; Malton *v.* Nesbit, 1 C. & P., 72.

9. In White *v.* Bailey, 10 Mich., 155, it is held to be improper to inquire of a medical witness whether the person in question possessed sufficient capacity to transact business or to make a will.

10. The following question may be put to a professional witness who has heard all the evidence before a jury: "Assuming the facts stated in the evidence to be true, what state or condition does it indicate?" Collett *v.* Collett, 1 Curtis, 687; Rex *v.* Searle, 1 M. & Rob., 75; Fenwick *v.* Bell, 1 C. & Kir., 312; McNaughton's case, 10 Cl. & F., 200.

11. Special knowledge must be fully established before a witness can be examined as an expert. Sinclare *v.* Roush, 14 Ind., 450; Winans *v.* N. Y. & E. R. Co., 21 Howard U. S., 88; Com. *v.* Wilson, 1 Gray, 337; Daniels *v.* Mosher, 2 Mich., 183; Lester *v.* Pittsfort, 7 Vt., 161; Mendum *v.* Com., 6 Rand., 704; Elfelt *v.* Smith, 1 Minn., 125; Tullis *v.* Kidd, Alab., 648.

12. The witness must be strictly confined to the special knowledge while testifying as an expert. Woodin *v.* Plafle, 1 Parker Cr. R., 464; Concord R. *v.* Greeley, 3 Foster, 237; Cooke *v.* State, 4 Zabrisk, 843; Robertson *v.* Stork, 15 N. H., 109; Rider *v.* Ocean Ins. Co.. 20 Pick., 259; Morse *v.* State, 6 Conn., 9; Sowers *v.* Duke, 8 Minn., 23; Page *v.* Parker, 40 N. H., 47; Woodburn *v.* Farmers' & M. Bank, 5 Watts & Serg., 447; Rochester *v.* Chester, 3 N. H., 349.

13. Limited knowledge, as attending upon persons made sick by breathing gas from the same leak, does not qualify one to act as an expert. Emmerson *v.* L. G. L. Co., 6 Allen, 146.

14. In an action to recover damages for personal injuries, medical witnesses may be called and give their opinion as to the permanency of the injury. Buell *v.* N. Y. C. R. Co., 31 N. Y. Court of Appeals, 314.

15. The opinions of persons not experts must be sustained by facts. Seibles *v.* Blackwell, 1 McMullan, 56.

16. The opinion of a witness who is not an expert as to the sanity of one charged with crime is incompetent, although based upon his own knowledge of facts. Com. *v.* Fairbanks, 2 Allen, 511. Referring to the case of Baxter *v.* Abbot, the Court says: "It was only held, by a decision not unanimous, that the opinion of a family physician as to the sanity of a testator might be introduced in evidence. But in general, where the jury have the facts in detail, they are as competent to

form a correct judgment as the witness; and the practical experience of those familiar with Courts shows that the defense of insanity is one easy to be made, and favorably listened to by juries. The rule, therefore, should not be extended beyond the adjudicated cases."

17. Mr. Justice Davis, of the Supreme Court of Maine, who, after saying that he considers juries far more trustworthy than experts on the subject of insanity, remarks: "If there is any kind of testimony that is not only of no value, but even worse than that, it is, in my judgment, that of medical experts. They may be able to state the diagnosis of the disease more learnedly; but upon the question whether it had, at a given time, reached such a stage that the subject of it was incapable of making a contract, or irresponsible for his acts, the opinion of his neighbors, if men of good common sense, would be worth more than that of all the experts in the country." Redfield on Wills, 2d ed., part I, pp. 103, 105.

18. Mr Justice Grier, of the Supreme Court of the United States, made the following remarks in delivering the opinion of the Court in Winans *v.* New York & Erie Railway: "Experience," said the learned Judge, "has shown that opposite opinions of persons professing to be experts may be obtained to any amount; and it often occurs that not only many days, but even weeks, are consumed in cross-examinations to test the skill or knowledge of such witnesses, and the correctness of their opinions, wasting the time and wearying the patience of both the Court and the jury, and perplexing instead of elucidating the question involved in the issue." 21 Howard, 101. And in his charge to the jury, in the recent trial of Andrews in Massachusetts, Chief Justice Chapman thus alludes to the conflicting opinions of the medical experts in the case: "I think the opinions of experts are not so highly regarded as they formerly were; for, while they often afford great aid in determining facts, it often happens that experts can be found to testify to any theory, however absurd." Boston Med. and Surg. Journal, Feb. 25, 1869. To these opinions may be added that of the late Chief Justice of Vermont, a jurist of high reputation, who, in his valuable work on Wills, remarks that "experience has shown, both here and in England, that medical experts differ quite as widely in their inferences and opinions as do the other witnesses. This has become so uniform a result with medical experts of late that they are beginning to be regarded much in the light of hired advocates, and their testimony as nothing more than a studied argument in favor of the side for which they have been called. So uniformly has this proved true in our experience, that it would excite scarcely less surprise to find an expert called by one side testifying in any particular in favor of the other side than to find the counsel upon either side arguing against their clients and in favor of their antagonists."

19. In a very late case in Massachusetts, a question proposed to an expert was excluded because it sought to establish a historical fact under the guise of a scientific opinion. McMahon *v.* Tyng, 14 Allen, 171. It is a well-settled rule of law that witnesses cannot state their views on matters of legal or moral obligation, nor on the manner in which other persons would probably be influenced if the parties acted in one way rather than in another. Therefore the opinions of medical practitioners upon the question whether a certain physician had honorably and faithfully discharged his duty to his medical brethren have been rejected. Greenleaf on Evidence, §441. But this rule does not prevent a medical man from testifying to a fact derived from his own observation, from which another

medical man's incapacity or unfaithfulness might be inferred. Thus, in an action to recover damages for a personal injury, a physician was allowed in a recent case to testify what had been another physician's previous treatment of his patient, what effect it had upon him, and whether or not he saw any evidence that the patient had been injured by such treatment. Barber *v.* Merriam, 11 Allen, 322. It was held, in the same case, that the statement of a patient to his physician as to the character and seat of his sensations, made for the purpose of receiving medical advice, are competent evidence in his favor in an action to recover damages for a personal injury, even though such statements were not made till after the action was brought. This is an exception to that rule of law which confines expressions of the bodily or mental feelings of a party to prove the existence of such feelings to those made at the time. In both of these cases the admission of this testimony is contrary to the general principle of evidence which excludes hearsay, because it cannot be subjected to the ordeal of a cross-examination to test its truth. It is admitted, however, from the necessity of the case, as this is the only way by which the condition of a patient can be made known to his physician, who has a fair opportunity of ascertaining its correctness by observation, and it is for the interest of the patient to tell the truth under these circumstances. And as the opinion of the physician would be competent evidence in such a case, it would be absurd to keep from the jury the reasons for his opinion, as they would then be unable to determine its soundness. But an expert will not be allowed to express an opinion upon the value of the opinions of other witnesses in the case. It is not his province or duty to make such comparisons. Haverhill Loan and Fund Association *v.* Cronin, 4 Allen, 141. But the narration by a patient to his physician of the cause of injuries received several months previously is not admissible as evidence of that cause. Chapin *v.* Inhabitants of Marlborough, 9 Gray, 244.

20. The wish to appear learned sometimes influences the witness to make a pedantic use of technical terms, and even professional men who are not troubled with a desire to parade the treasures of their vocabulary often use language which, although intelligible enough to the scientific student, is wholly beyond the comprehension of the Court and jury. The following anecdotes illustrate the ridiculous extent to which this practice has sometimes been carried: "In a case of alleged child-murder, a medical witness, being asked for a plain opinion of the cause of death, said that it was owing 'to atelectasis and a general engorgement of the pulmonary tissue.' On a trial for an assault, which took place at the Assizes some years since, a surgeon, in giving his evidence, informed the Court that, on examining the prosecutor, he found him suffering from a severe contusion of the integuments under the left orbit, with great extravasation of blood, and ecchymosis in the surrounding cellular tissue, which was in a tumefied state. There was, also, considerable abrasion of the cuticle.' *Judge:* 'You mean, I suppose, that the man had a bad black eye.' *Witness:* 'Yes.' *Judge:* 'Then why not say so at once?'" Taylor's Med. Jur., 6th Am. ed., 53.

21. If the expert does not understand the question, it is very often his best course to acknowledge his ignorance of the subject. Let this be done distinctly. The question may be presented in another form. If not understood, let this be at once stated. Dr. Walter Channing.

G.—*Fees—General Notes.*

1. A surgeon or physician is entitled to a reasonable reward for his services. The amount is a question for the jury. The eminence of the practitioner, wealth of patient, delicacy and difficulty of operation to be considered. The principle has never been adopted in this country that the professions of physicians and counselors are merely honorary, and cannot be charged for. Adams *v.* Stevens, 26 Wend., 451; Baxter *v.* Gray, 4 Scott N. R., 374; Mock *v.* Kelley, 3 Alab., 387; Beekman *v.* Planter, 15 Barb., 550; Judah *v.* McNamee, 3 Blackf., 269; McPherson *v.* Chedell, 24 Wend., 15; Simmons *v.* Means, 8 Sm. & Marsh, 397; Rouse *v.* Morris, 17 Ser. & R., 328. Smith *v.* Watson, 14 Vt , 332; Sweet *v.* Hooper, 1 Davies Ab., 619; Mooney *v.* Lloyd, 5 Ser. & R., 416; Wilcoks on Med. Prof., 111. Can recover for services of students. People *v.* Monroe, 4 Wend., 200. No agreed specified price necessary. Story, Bailm., §375. Book of original entries may be offered in evidence, supported by his own oath, 3 Dane's Ab., cap, 81, a. 5, §16. Success not necessary to a recovery of fees. Kanna *v.* McMullen, Peake, 83; Hupe *v.* Phelps, 2 Starkie, 424.

2. A medical charge should be specific, and not general, giving the number of visits and dates. Hughes *v.* Hampton, 3 Const. Rep., (S. C.) 745. He is not, however, limited to the amount of the first bill presented, if the services are shown to be worth more. Miller *v.* Beal, 26 Ind., 234. "Consultation" visits must be limited; if frequent, they become ordinary visits. Succession of Duclas, 11 Louis., A., 406. Physician and surgeon, acting together in the management of a case, may be sued jointly. 1 Slater *v.* Baker and Stapleton, 2 Wilson, 359. An epidemic does not authorize exorbitant fees. Collins *v.* Grady, 13 Louis., A., 95; also, 2 Louis , 331. Cannot recover fees if guilty of malpractice. Bellinger *v.* Craigue, 31 Barb., 534; Long *v.* Morrison, 14 Ind., 595; Ritchey *v.* West, 23 Ill., 385; 2 Parsons on Contracts, 106.

3. A physician must respond to the subpœna of a Court; but when put upon the stand as an expert, he is not obliged to testify until he is paid, by the party calling him, such a fee as the professional opinion and time spent in Court would be worth under ordinary circumstances out of Court. 1 Green. Ev., §310, n; Webb *v.* Page, 1 Carr & Kir., 23. In this case the Court said: "There is a distinction between the case of a man who sees a fact and is called to prove it in a Court of justice, and that of a man who is selected by a party to give his opinion on a matter with which he is peculiarly conversant from the nature of his employment in life. The former is bound, as a matter of public duty, to speak of a fact which happens to have fallen within his knowledge: without such testimony the course of justice must be stopped. The latter is under no such obligation: there is no such necessity for his evidence; and the party calling him must pay him." Taylor's Med. Juris., 6th Amer. ed., 38; Redfield on Wills, 2d ed., part I, 155, note 46.

4. In a case in the U. S. District Court, Mr. Justice Sprague refused to compel the attendance of an interpreter who had neglected to obey a subpœna. The learned Judge said that "a similar question had heretofore arisen as to experts, and he had declined to issue process to arrest in such cases. When a person has knowledge of any fact pertinent to an issue to be tried, he may be compelled to attend as a witness. In this all stand upon equal ground. But to compel a

person to attend merely because he is accomplished in a particular science, art, or profession, would subject the same individual to be called upon in every cause in which any question in his department of knowledge is to be solved. Thus, the most eminent physician might be compelled, merely for the ordinary witness' fees, to attend from the remotest part of the district in which a medical question might arise. This is so unreasonable that nothing but necessity can justify it. The case of an interpreter is analogous to that of an expert. It is not necessary to say what the Court would do if it appeared that no other interpreter could be obtained by reasonable effort." In the matter of Roelker, 1 Sprague's Dec., 276.

5. When a physician, during his attendance upon a patient, (the defendant,) having also attended patients infected by small pox, and, by want of proper care, communicated the infection to the defendant and his family, making it necessary for further attendance and an increased bill; it was held, in an action by the physician to recover for his services, that no recovery could be had for the additional service rendered necessary by the plaintiff's own want of proper care; and the defendant was entitled to a further deduction from that portion of his bill which he had sustained by bodily suffering and loss of time. Piper *v.* Menifee, 12 B. Monr., 465.

6. The usual price per visit must be charged, or a notice given of change of price. Sidener *v.* Fetter, 19 Ind., 310.

7. Medical attendance on paupers, or persons sick with contagious disease, cannot be charged to the overseers of the poor or to the town without a special contract. Evarts *v.* Adams, 12 Wend., 449; Kellogg *v.* St. George, 28 Maine, 255.

8. Under a contract that if there is no cure there shall be no pay, the physician cannot recover for medicines unless there has been a performance of the contract. Smith *v.* Hyde, 19 Vt., 54.

9. An unlicensed physician cannot maintain an action for services where the statute requires a diploma or license, neither before nor after the repeal of such statute. Bailey *v.* Mogg, 4 Denio, 60; Warren *v.* Saxby, 12 Vt, 146. See *per contra*, Hewitt *v.* Wilcox, 1 Metc., 154; Durand *v.* Grimes, 18 Gray, 693; Jordan *v.* B. & B., 19 Alab., 238.

10. The administration of drugs must conform to State laws, though covered by a patent. Jordon *v.* Overseers of Dayton, 4 Ohio, 295; Smith *v.* Tracy, 2 Hall Sup. Ct. (N. Y) R., 465; Thompson *v.* Staats, 15 Wend., 395.

11. If a defendant, when sued for fees, pleads that the plaintiff was not licensed to practice, having employed him as a physician, the defendant must prove that he was not so licensed. Dickinson *v.* Gordy, 5 Rob., 489; Provosty *v.* Nichols, 11 Martin, 21; 19 Alab. 238.

12. The case of Walsh *v.* Sayer, in the Supreme Court of New York, establishes the right of a surgeon to demand *personal* inspection of the party alleged to be the subject of malpractice *previous* to the trial of the case. Jones, J., says: "I am aware there is no recorded case of an application for any such discovery having been granted; but at the same time there is no recorded case of any application having been denied. Nor have I overlooked the fact that the Court of Chancery established many rules for its guidance in granting and refusing a discovery asked for; but none of these rules are antagonistic to granting this motion. The fact that the discovery asked is a portion of the body, at first disposed the mind to regard it unfavorably on the ground of delicacy. But it is not

the first case in which such an examination has been had." 2 Black. Coms., 333; 5 Paige R., 554; 1 Beck's Med. Juris., 116, 125, 204, 205; Walsh *v.* Sayre, 50, 51, pamphlet edition, Geo. H. Shaw, New York.

13. The general principles applicable to physicians and surgeons are well unfolded in a recent case in Maine, where it was said that—

"Physicians and surgeons who offer themselves to the public as practitioners, impliedly promise thereby that they possess the requisite knowledge and skill to enable them to treat such cases as they undertake with reasonable success.

"This rule does not require the possession of the highest, or even the average skill, knowledge, or experience, but only such as will enable them to treat the case understandingly and safely.

"The law also implies that, in the treatment of all cases which they undertake, they will exercise reasonable and ordinary care and diligence.

"They are also bound always to use their best skill and judgment in determining the nature of the malady, and the best mode of treatment, and in all respects to do their best to secure a perfect restoration of their patients to health and soundness.

"But physicians and surgeons do not impliedly warrant the recovery of their patients, and are not liable on account of any failure in that respect, unless through some default of their own duty, as already defined." Patten *v.* Wiggin, 51 Maine, 594.

14. In insanity, the following rulings in respect to wills are important:

The testator must, at the time of the execution of a will, have been of sound disposing mind; that this does not imply that the powers of the mind have not been weakened or impaired by disease or old age; that it is not sufficient that the testator was able to answer questions rationally, nor was it necessary that he should have been of sufficient capacity to engage in complex and intricate business. If he was at the time capable of understanding the nature of the business and the elements of the will—that is, the nature and extent of his property, and the persons to whom he meant to convey it, and the mode of distribution—it was sufficient. Converse *v.* Converse, 21 Vt., 168; Redfield on Wills, §9, n. 2.

In Connecticut, the Court held that all which is necessary to testamentary capacity is an understanding of the nature of the business the testator was engaged in, a recollection of the property he means to dispose of, and of the persons to whom he means to convey it, and of the manner he means to distribute it among them. Comstock *v.* Hadlyme, 8 Conn., 265; Kinne *v.* Kinne, 9 Conn., 102.

In Pennsylvania, it was held that a less degree of mental imbecility is necessary to invalidate a will than would be ground of acquittal from a criminal charge. McTaggart *v.* Thompson, 14 Penn. St., 149.

The important question to be settled is—Whether the document claimed to be the will of the testator was really the product of his own free will and action, or that of others; in short, whether it is the *will of the testator, or the act of some other person or persons?* 1 Redfield on Wills, 132.

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